GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: August 17, 2004, 07:21:57 ; Search time 81 Seconds
(without alignments)
2363.680 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 345
Sequence: 1 atgagcacacttcctaaacc.....aaatgacccccggcgcagga 345

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/2/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	309	89.6	309	3	US-08-836-075A-49	Sequence 49, Appl
2	261.6	75.8	652	3	US-08-836-075A-59	Sequence 59, Appl
3	259.4	75.2	573	2	US-08-290-665A-136	Sequence 136, App
4	259.4	75.2	573	4	US-09-194-949A-5	Sequence 5, Appli
5	259.4	75.2	573	5	PCT-US95-10398-136	Sequence 136, App
6	257.8	74.7	573	2	US-08-290-665A-141	Sequence 141, App
7	257.8	74.7	573	5	PCT-US95-10398-141	Sequence 141, App
8	257.8	74.7	803	1	US-08-157-235-4	Sequence 4, Appli
9	257.8	74.7	803	1	US-08-157-235-5	Sequence 5, Appli
10	256.2	74.3	573	2	US-08-290-665A-135	Sequence 135, App
11	256.2	74.3	573	2	US-08-290-665A-137	Sequence 137, App
12	256.2	74.3	573	2	US-08-290-665A-138	Sequence 138, App
13	256.2	74.3	573	5	PCT-US95-10398-135	Sequence 135, App
14	256.2	74.3	573	5	PCT-US95-10398-137	Sequence 137, App
15	256.2	74.3	573	5	PCT-US95-10398-138	Sequence 138, App
16	256.2	74.3	1037	1	US-08-462-195-1	Sequence 1, Appli
17	256.2	74.3	1037	2	US-08-636-883-1	Sequence 1, Appli
18	256.2	74.3	1037	3	US-09-127-829-1	Sequence 1, Appli
19	254.6	73.8	573	2	US-08-290-665A-107	Sequence 107, App
20	254.6	73.8	573	2	US-08-290-665A-114	Sequence 114, App
21	254.6	73.8	573	2	US-08-290-665A-119	Sequence 119, App
22	254.6	73.8	573	5	PCT-US95-10398-107	Sequence 107, App
23	254.6	73.8	573	5	PCT-US95-10398-114	Sequence 114, App
24	254.6	73.8	573	5	PCT-US95-10398-119	Sequence 119, App
25	254.6	73.8	803	1	US-08-157-235-2	Sequence 2, Appli
26	253.6	73.5	573	2	US-08-290-665A-139	Sequence 139, App
27	253.6	73.5	573	5	PCT-US95-10398-139	Sequence 139, App
28	253.6	73.5	803	1	US-08-157-235-6	Sequence 6, Appli
29	253	73.3	573	2	US-08-290-665A-113	Sequence 113, App
30	253	73.3	573	5	PCT-US95-10398-113	Sequence 113, App
31	253	73.3	803	1	US-08-157-235-1	Sequence 1, Appli
32	253	73.3	1539	2	US-08-470-426B-17	Sequence 17, Appl
33	253	73.3	1863	2	US-08-470-426B-14	Sequence 14, Appl
34	253	73.3	2433	3	US-08-612-973-49	Sequence 49, Appl
35	253	73.3	2433	3	US-08-927-597-49	Sequence 49, Appl
36	251.4	72.9	345	1	US-08-324-977-7	Sequence 7, Appli
37	251.4	72.9	345	2	US-08-384-616-7	Sequence 7, Appli
38	251.4	72.9	345	2	US-08-904-686A-7	Sequence 7, Appli
39	251.4	72.9	345	3	US-09-315-850-7	Sequence 7, Appli
40	251.4	72.9	573	2	US-08-290-665A-108	Sequence 108, App
41	251.4	72.9	573	5	PCT-US95-10398-108	Sequence 108, App
42	251.4	72.9	803	1	US-08-157-235-3	Sequence 3, Appli
43	251.4	72.9	1167	1	US-08-324-977-9	Sequence 9, Appli
44	251.4	72.9	1167	2	US-08-384-616-9	Sequence 9, Appli
45	251.4	72.9	1167	2	US-08-904-686A-9	Sequence 9, Appli

ALIGNMENTS

```
RESULT 1
US-08-836-075A-49
; Sequence 49, Application US/08836075A
; Patent No. 6180768
;  GENERAL INFORMATION:
;    APPLICANT:  MAERTENS, GEERT
;    APPLICANT:  STUYVER, LIEVEN
;    TITLE OF INVENTION:  NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;    TITLE OF INVENTION:  AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;    TITLE OF INVENTION:  AGENTS
;    NUMBER OF SEQUENCES:  207
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  ARNOLD, WHITE & DURKEE
;      STREET:  P.O. BOX 4433
;      CITY:  HOUSTON
;      STATE:  TEXAS
;      COUNTRY:  USA
;      ZIP:  77210-4433
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  Microsoft Word 6.0 / ASCII text output
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/836,075A
;      FILING DATE:  21 Apr 1997
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/EP95/04155
;      FILING DATE:  23 Oct 1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  EP 94870166.9
;      FILING DATE:  21 Oct 1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  EP 95870076.7
;      FILING DATE:  28 Jun 1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  KAMMERER, PATRICIA A.
;      REGISTRATION NUMBER:  29,775
;      REFERENCE/DOCKET NUMBER:  INNS:004
;  INFORMATION FOR SEQ ID NO:  49:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  309 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-836-075A-49
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  Query Match             89.6%;  Score 309;  DB 3;  Length 309;
  Best Local Similarity   100.0%;  Pred. No. 1.7e-78;
  Matches  309;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60

Qy         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120

Qy        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180

Qy        181 GGCGCCAACCCATCCCCAGGGCGCGCCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240
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Db        181 GGCGCCAACCCATCCCCAGGGCGCGCCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240

Qy        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300

Qy        301 GCGGCTCTC 309
              |||||||||
Db        301 GCGGCTCTC 309


RESULT 2
US-08-836-075A-59
; Sequence 59, Application US/08836075A
; Patent No. 6180768
;  GENERAL INFORMATION:
;    APPLICANT:  MAERTENS, GEERT
;    APPLICANT:  STUYVER, LIEVEN
;    TITLE OF INVENTION:  NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;    TITLE OF INVENTION:  AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;    TITLE OF INVENTION:  AGENTS
;    NUMBER OF SEQUENCES:  207
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  ARNOLD, WHITE & DURKEE
;      STREET:  P.O. BOX 4433
;      CITY:  HOUSTON
;      STATE:  TEXAS
;      COUNTRY:  USA
;      ZIP:  77210-4433
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  Microsoft Word 6.0 / ASCII text output
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/836,075A
;      FILING DATE:  21 Apr 1997
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/EP95/04155
;      FILING DATE:  23 Oct 1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  EP 94870166.9
;      FILING DATE:  21 Oct 1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  EP 95870076.7
;      FILING DATE:  28 Jun 1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  KAMMERER, PATRICIA A.
;      REGISTRATION NUMBER:  29,775
;      REFERENCE/DOCKET NUMBER:  INNS:004
;  INFORMATION FOR SEQ ID NO:  59:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  652 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-836-075A-59

  Query Match             75.8%;  Score 261.6;  DB 3;  Length 652;
  Best Local Similarity   86.7%;  Pred. No. 5.7e-65;
  Matches  299;  Conservative    0;  Mismatches   45;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||  |||||||||| ||||||||||||||||||||||||||| ||| ||||||
Db        239 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAAAGAAACACCAACCGCCGCCCACAG 298

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| ||||| || |||||||||||||||| |||||||||| ||||||
Db        299 GACGTCAAGTTCCCGGGCGGTGGCCAGATCGTTGGTGGAGTCTACGTGCTACCGCGCAGG 358

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||    |||||||||| |||| ||| |||||||| ||||||||||||||||   |
Db        359 GGCCCTAGATTGGGTGTGCGCGCAGCGCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGG 418

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||| || |||| || ||||||| |||||||||||||||||| |||||||||
Db        419 AGGCGCCAACCTATTCCCAAGGAGCGCCGACCCGAGGGCAGGTCCTGGGCGCAGCCCGGG 478

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||| |||||||| ||||| || |||||||||||||||||||  ||||||||||||
Db        479 TACCCCTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGTNGGCTCCTGTCCCCT 538

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || ||    ||||| || | ||||||||||| |||
Db        539 CGCGGCTCCCGTCCTAGTTGGGGTCCTACTGACCCCCGGCGTAGG 583


RESULT 3
US-08-290-665A-136
; Sequence 136, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  136:
```

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;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  573 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  S52
US-08-290-665A-136

  Query Match             75.2%;  Score 259.4;  DB 2;  Length 573;
  Best Local Similarity   86.4%;  Pred. No. 2.3e-64;
  Matches  298;  Conservative    0;  Mismatches   46;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||||||||||||| |||||||||||||||||||| ||   || ||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||| || ||||| |||||||||||||||||| |||||| | || ||||||
Db         61 GACGTTAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||| |  |||||||||| ||   ||| || ||||| || ||||| || |||||| |
Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              | || || || ||||||| |||||| || | ||| ||| |||||||||||||||||||
Db        181 CGACGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| ||||||||||||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCA 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
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Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAACGACCCCCGGCGGAGG 345



RESULT 4
US-09-194-949A-5
; Sequence 5, Application US/09194949A
; Patent No. 6653125
; GENERAL INFORMATION:
;  APPLICANT: Merck & Co., Inc.
;  APPLICANT:  Donnelly, John J.
;  APPLICANT:  Fu, Tong-Ming
;  APPLICANT:  Liu, Margaret A.
;  APPLICANT:  Shiver, John W.
;  TITLE OF INVENTION: SYNTHETIC HEPATITIS C GENES
;  FILE REFERENCE: 19732YP
;  CURRENT APPLICATION NUMBER: US/09/194,949A
;  CURRENT FILING DATE:  2000-02-17
;  PRIOR APPLICATION NUMBER: PCT/US97/09884
;  PRIOR FILING DATE: 1997-06-06
;  PRIOR APPLICATION NUMBER: 60/020,494
;  PRIOR FILING DATE: 1996-06-11
;  PRIOR APPLICATION NUMBER: 60/033,534
;  PRIOR FILING DATE: 1996-12-20
;  PRIOR APPLICATION NUMBER: 08/865,823
;  PRIOR FILING DATE: 1997-05-30
;  NUMBER OF SEQ ID NOS: 25
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 5
;   LENGTH: 573
;   TYPE: DNA
;   ORGANISM: Hepatitis C Virus
US-09-194-949A-5

  Query Match             75.2%;  Score 259.4;  DB 4;  Length 573;
  Best Local Similarity   86.4%;  Pred. No. 2.3e-64;
  Matches  298;  Conservative    0;  Mismatches   46;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||   |||||||| |||||||||||||| | |||||||||| ||| ||||||
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| ||||| |||||||||||||||||||||||| || | || ||||||
Db         61 GACGTCAAGTTCCCGGGCGGTGGTCAGATCGTTGGTGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||  |||||||||||| ||     | |||||||||||||||||||||||||||  |
Db        121 GGCCCCAGGTTGGGTGTGCGCGCGACTAGGAAGACTTCCGAGCGGTCGCAACCTCGTGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| || || ||||||| ||| |||||  ||||||||||||||||||||||||||||
Db        181 AGGCGACAGCCTATCCCCAAGGCTCGCCGGCCCGAGGGCAGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| |||||||||| |||||||||||| ||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGCAATGAGGGCTTCGGGTGGGCAGGATGGCTCCTGTCCCCC 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||| ||    |||||||| | ||||||||||| |||
Db        301 CGCGGCTCTCGGCCTAGTTGGGGCCCCACTGACCCCCGGCGTAGG 345


RESULT 5
PCT-US95-10398-136
; Sequence 136, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  136:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
```

```
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  S52
PCT-US95-10398-136

  Query Match             75.2%;  Score 259.4;  DB 5;  Length 573;
  Best Local Similarity   86.4%;  Pred. No. 2.3e-64;
  Matches  298;  Conservative    0;  Mismatches   46;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||| ||  || ||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||| || ||||| |||||||||||||||||| |||||| | || ||||||
Db         61 GACGTTAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||| | |||||||||||| ||   ||| || ||||| || ||||| || |||||| |
Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              | || || || ||||||| |||||| || | ||| ||| ||||||||||||||||||||||
Db        181 CGACGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| |||||||||||||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCA 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || || || |||||||||| |||||||||| |||
Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAACGACCCCCGGCGGAGG 345


RESULT 6
US-08-290-665A-141
; Sequence 141, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  141:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z1
US-08-290-665A-141

  Query Match             74.7%;  Score 257.8;  DB 2;  Length 573;
  Best Local Similarity   86.1%;  Pred. No. 6.5e-64;
  Matches  297;  Conservative    0;  Mismatches   47;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              |||||||||  |||||||||| |||||||||||||| | ||||||||||   ||| || |
Db          1 ATGAGCACAAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGTCGCCCCATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              || || || ||||| |||||||| |||||||||| ||||||||| |||| || ||||||
Db         61 GATGTGAAATTCCCGGGCGGCGGCCAGATCGTTGGCGGAGTTTACTTGCTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||| |||||||||||| |||| || |||||||| |||||||| |||||||  |
Db        121 GGCCCCCGGTTGGGTGTGCGCGCAGCTCGGAAGACTTCGGAGCGGTCACAACCTCGTGGC 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| || || |||||| |||||||||  ||||||||||||||||||||||||||||||
Db        181 AGGCGTCAGCCTATCCCCAAGGCGCGCCGGTCCGAGGGCAGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| || || |||||||||| ||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTTTACGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCCCCC 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||| ||  | ||||| |||||||| ||||| |||||||| |||
Db        301 CGCGGTTCCAGGCCGTCTTGGGGCCCCAATGATCCCCGGCGTAGG 345


RESULT 7
PCT-US95-10398-141
; Sequence 141, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
```

```
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  141:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  573 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  Z1
PCT-US95-10398-141

  Query Match            74.7%;  Score 257.8;  DB 5;  Length 573;
  Best Local Similarity  86.1%;  Pred. No. 6.5e-64;
  Matches  297;  Conservative    0;  Mismatches   47;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              ||||||||  ||||||||  |||||||||||||||| | ||||||||||   ||| || |
Db          1 ATGAGCACAAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGTCGCCCCATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              || || || ||||| |||||||| |||||||||| ||||||||| |||| || ||||||
Db         61 GATGTGAAATTCCCGGGCGGCGGCCAGATCGTTGGCGGAGTTTACTTGCTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||||  |||||||||||| ||||   || |||||||| |||||||| ||||||||  |
Db        121 GGCCCCCGGTTGGGTGTGCGCGCAGCTCGGAAGACTTCGGAGCGGTCACAACCTCGTGGC 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||  ||  ||  |||||||  |||||||||  ||||||||||||||||||||||||||||
Db        181 AGGCGTCAGCCTATCCCCAAGGCGCGCCGGTCCGAGGGCAGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||  ||  ||  ||||||||||  |||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTTTACGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCCCCC 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||  ||  |  |||||  ||||||||  |||||  ||||||||  |||
Db        301 CGCGGTTCCAGGCCGTCTTGGGGCCCCAATGATCCCCGGCGTAGG 345


RESULT 8
US-08-157-235-4
; Sequence 4, Application US/08157235
; Patent No. 5550016
;  GENERAL INFORMATION:
;     APPLICANT:  OKAMOTO, Hiroaki
;     TITLE OF INVENTION:  OLIGONUCLEOTIDES OF HCV, PRIMERS AND
;     TITLE OF INVENTION:  PROBES THEREFROM, METHOD OF DETERMINING HCV GENOTYPES,
;     TITLE OF INVENTION:  AND METHOD OF DETECTING HCV IN SAMPLES
;     NUMBER OF SEQUENCES:  20
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Beveridge, DeGrandi, Weilacher & Young
;       STREET:  1850 M Street N.W., Suite 800
;       CITY:  Washington
;       STATE:  D.C.
;       COUNTRY:
;       ZIP:  20036
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/157,235
;       FILING DATE:  24-NOV-1993
;       CLASSIFICATION:  435
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  JP 354370/92
;       FILING DATE:  27-NOV-1992
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Robert G. Weilacher
;       REGISTRATION NUMBER:  20,531
;       REFERENCE/DOCKET NUMBER:  06/87-49206
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  202-659-2811
;       TELEFAX:  202-659-1462
;       TELEX:  64470
;   INFORMATION FOR SEQ ID NO:  4:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  803 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
US-08-157-235-4

  Query Match            74.7%;  Score 257.8;  DB 1;  Length 803;
  Best Local Similarity  86.1%;  Pred. No. 7.2e-64;
  Matches  297;  Conservative    0;  Mismatches   47;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||||| ||  || ||||||
Db        298 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 357

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||  |||||||| || |||||  ||||||||||||||||||  |||||  | || ||||||
Db        358 GACGTCAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 417

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||  |  ||||||||||| ||   ||| || |||||  || |||||  || ||||||  |
Db        418 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 477

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |  ||  ||  ||  |||||||  ||||||  ||  |  |||  |||  ||||||||||||||||||
Db        478 CGACGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCCGGG 537

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||  |||||  ||  ||||||||||||||||||||||||||||||||||||
Db        538 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCA 597

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||  ||  ||  ||||||||||||||||||||||  |||
Db        598 CGCGGCTCCCGTCCATCCTGGGGCCCAAATGACCCCCGGCGGAGG 642


RESULT 9
US-08-157-235-5
; Sequence 5, Application US/08157235
; Patent No. 5550016
;  GENERAL INFORMATION:
;     APPLICANT:  OKAMOTO, Hiroaki
;     TITLE OF INVENTION:  OLIGONUCLEOTIDES OF HCV, PRIMERS AND
;     TITLE OF INVENTION:  PROBES THEREFROM, METHOD OF DETERMINING HCV GENOTYPES,
;     TITLE OF INVENTION:  AND METHOD OF DETECTING HCV IN SAMPLES
;     NUMBER OF SEQUENCES:  20
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Beveridge, DeGrandi, Weilacher & Young
;       STREET:  1850 M Street N.W., Suite 800
;       CITY:  Washington
;       STATE:  D.C.
;       COUNTRY:
;       ZIP:  20036
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/157,235
;       FILING DATE:  24-NOV-1993
```

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;       CLASSIFICATION:  435
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  JP 354370/92
;       FILING DATE:  27-NOV-1992
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Robert G. Weilacher
;       REGISTRATION NUMBER:  20,531
;       REFERENCE/DOCKET NUMBER:  06/87-49206
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  202-659-2811
;       TELEFAX:  202-659-1462
;       TELEX:  64470
;   INFORMATION FOR SEQ ID NO:  5:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  803 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
US-08-157-235-5

  Query Match             74.7%;  Score 257.8;  DB 1;  Length 803;
  Best Local Similarity   86.1%;  Pred. No. 7.2e-64;
  Matches  297;  Conservative    0;  Mismatches   47;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||||  ||  |||||||
Db        298 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 357

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||  |||||||| || |||||  |||||||||||||||||  ||||||  |  ||  ||||||
Db        358 GACGTCAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 417

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||  |  ||||||||||  ||   |||  ||  |||||  ||  ||||||  |
Db        418 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 477

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              | ||  ||  ||  |||||||  ||||||  ||  |  |||  |||  ||||||||||||||||||||
Db        478 CGACGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCCGGG 537

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||||  |||||  ||  ||||||||||||||||||||  ||||||||||||||||
Db        538 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGATGGCTCCTGTCCCCG 597

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||  ||  ||  ||  ||||||||||||||||||||||  |||
Db        598 CGCGGCTCCCGTCCATCATGGGGCCCAAATGACCCCCGGCGGAGG 642


RESULT 10
US-08-290-665A-135
; Sequence 135, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;     APPLICANT:  BUKH, J., MILLER, R.H. AND
;     APPLICANT:  PURCELL, R.H.
;     TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;     TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;     TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;     TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;     TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;     NUMBER OF SEQUENCES:  263
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  MORGAN & FINNEGAN
;       STREET:  345 PARK AVENUE
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
;       ZIP:  10154
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  FLOPPY DISK
;       COMPUTER:  IBM PC COMPATIBLE
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  WORDPERFECT 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/290,665A
;       FILING DATE:  15-AUG-1994
;       CLASSIFICATION:  435
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  135:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  573 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  HK10
US-08-290-665A-135

  Query Match             74.3%;  Score 256.2;  DB 2;  Length 573;
  Best Local Similarity   85.8%;  Pred. No. 1.8e-63;
  Matches  296;  Conservative    0;  Mismatches   48;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||||  ||  |||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||  ||  |||||  ||||||||||||||||||  ||||||  |  ||  ||||||
Db         61 GACGTTAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||  |  ||||||||||  ||   |||  ||  |||||  ||  ||||||||  ||||||  |
Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCGCAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              | ||  ||  ||  |||||||  ||||||  ||  |  |||  |||  ||||||||||||||||||||
Db        181 CGACGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||||  |||||  ||  ||||||||||||||||||||  ||||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGATGGCTCCTGTCCCCA 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||  ||  ||  ||  ||||||||||||  ||||||||||  ||
Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAACGACCCCCGGCGACGG 345


RESULT 11
US-08-290-665A-137
; Sequence 137, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;     APPLICANT:  BUKH, J., MILLER, R.H. AND
;     APPLICANT:  PURCELL, R.H.
;     TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;     TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;     TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;     TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;     TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;     NUMBER OF SEQUENCES:  263
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  MORGAN & FINNEGAN
;       STREET:  345 PARK AVENUE
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
;       ZIP:  10154
```

```
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  137:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S2
US-08-290-665A-137

  Query Match             74.3%;  Score 256.2;  DB 2;  Length 573;
  Best Local Similarity   85.8%;  Pred. No. 1.8e-63;
  Matches  296;  Conservative    0;  Mismatches   48;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||| ||  || ||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||| | |||||||| || ||||| |||||||||||||||||| |||||| | || ||||||
Db         61 GACATCAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||| |  |||||||||| ||   ||| || ||||| || ||||| || |||||| |
Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||| || || ||||||| |||||| || | ||| ||| | ||||||||||||||||||
Db        181 CGGCGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGATCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| || ||||||||||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCA 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || || || |||||||||||||||||||||||| |||
Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAATGACCCCCGGCGGAGG 345


RESULT 12
US-08-290-665A-138
; Sequence 138, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  138:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  DK12
US-08-290-665A-138

  Query Match             74.3%;  Score 256.2;  DB 2;  Length 573;
  Best Local Similarity   85.8%;  Pred. No. 1.8e-63;
  Matches  296;  Conservative    0;  Mismatches   48;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||| ||  || ||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| || ||||| |||||||||||||||||| |||||| | || ||||||
Db         61 GACGTCAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||  ||||||||||| ||   ||| || ||||| || ||||| || |||||| |
Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||| || || ||||||| |||||| || | ||| ||| |||||||||||||||| |||
Db        181 CGGCGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCTGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| || ||||||||||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCA 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || || || |||||||||||| |||||||||| |||
Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAACGACCCCCGGCGGAGG 345


RESULT 13
PCT-US95-10398-135
; Sequence 135, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
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;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  MORGAN & FINNEGAN
;       STREET:  345 PARK AVENUE
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
;       ZIP:  10154
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  FLOPPY DISK
;       COMPUTER:  IBM PC COMPATIBLE
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  WORDPERFECT 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/US95/10398
;       FILING DATE:  15-AUG-1995
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/086,428
;       FILING DATE:  29 JUNE 1993
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/290/665
;       FILING DATE:  15 AUGUST 1994
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  135:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  573 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  HK10
PCT-US95-10398-135

  Query Match             74.3%;  Score 256.2;  DB 5;  Length 573;
  Best Local Similarity   85.8%;  Pred. No. 1.8e-63;
  Matches  296;  Conservative    0;  Mismatches   48;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||| ||  || ||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||| || ||||| |||||||||||||||||| |||||| | || ||||||
Db         61 GACGTTAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||  |  |||||||||||  ||   ||| || ||||| || |||||||| |||||| |
Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCGCAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              | || || || ||||||| |||||| || | ||| ||| ||||||||||||||||||||
Db        181 CGACGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||| ||||| || ||||||||||||||||||| ||||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGATGGCTCCTGTCCCCA 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || || || |||||||||| ||||||||||  ||
Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAACGACCCCCGGCGACGG 345


RESULT 14
PCT-US95-10398-137
; Sequence 137, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  137:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S2
PCT-US95-10398-137

  Query Match             74.3%;  Score 256.2;  DB 5;  Length 573;
  Best Local Similarity   85.8%;  Pred. No. 1.8e-63;
  Matches  296;  Conservative    0;  Mismatches   48;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||| ||  || ||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||| | |||||||| || ||||| |||||||||||||||||| |||||| | || ||||||
Db         61 GACATCAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||  |  |||||||||||  ||   ||| || ||||| || |||||| || |||||| |
Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||| || || ||||||| |||||| || | ||| ||| | ||||||||||||||||||||
Db        181 CGGCGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGATCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||| ||||| || ||||||||||||||||||| ||||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCA 300
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Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||  ||  ||  ||  ||||||||||||||||||||||||  |||
Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAATGACCCCCGGCGGAGG 345


RESULT 15
PCT-US95-10398-138
; Sequence 138, Application PC/TUS9510398
;  GENERAL INFORMATION:
;     APPLICANT:  BUKH, J., MILLER, R.H. AND
;     APPLICANT:  PURCELL, R.H.
;     TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;     TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;     TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;     TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;     TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;     NUMBER OF SEQUENCES:  263
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  MORGAN & FINNEGAN
;       STREET:  345 PARK AVENUE
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
;       ZIP:  10154
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  FLOPPY DISK
;       COMPUTER:  IBM PC COMPATIBLE
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  WORDPERFECT 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/US95/10398
;       FILING DATE:  15-AUG-1995
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/086,428
;       FILING DATE:  29 JUNE 1993
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/290/665
;       FILING DATE:  15 AUGUST 1994
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  138:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  573 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  DK12
PCT-US95-10398-138

  Query Match             74.3%;  Score 256.2;  DB 5;  Length 573;
  Best Local Similarity   85.8%;  Pred. No. 1.8e-63;
  Matches  296;  Conservative    0;  Mismatches   48;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||||||||||||| |||||||||||||||||||||||||  ||  || ||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||  |||||||| ||  ||||| |||||||||||||||||  ||||||  |  ||  ||||||
Db         61 GACGTCAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||  |  ||||||||||| ||   ||| || |||||  || |||||  || ||||||  |

Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||  ||  ||  |||||||  ||||||  ||  |  |||  |||  ||||||||||||||||  |||
Db        181 CGGCGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCTGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||  |||||  ||  ||||||||||||||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCA 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||  ||  ||  ||  ||||||||||  ||||||||||  |||
Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAACGACCCCCGGCGGAGG 345


Search completed: August 17, 2004, 12:09:55
Job time : 82 secs
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GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: August 17, 2004, 11:09:51 ; Search time 355 Seconds
(without alignments)
4768.393 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 345
Sequence: 1 atgagcacacttcctaaacc.....aaatgacccccggcgcagga 345

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 3225727 seqs, 2453303834 residues

Total number of hits satisfying chosen parameters: 6451454

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA:*
1: /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
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9: /cgn2_6/ptodata/2/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*
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14: /cgn2_6/ptodata/2/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/US10C_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
18: /cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq:*
19: /cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	345	100.0	345	13	US-09-873-224-147	Sequence 147, App
2	334	96.8	346	10	US-09-899-046-147	Sequence 147, App
3	334	96.8	346	10	US-09-878-281-147	Sequence 147, App
4	309	89.6	309	9	US-09-851-138-49	Sequence 49, Appl
5	261.6	75.8	652	9	US-09-851-138-59	Sequence 59, Appl
6	260.2	75.4	499	10	US-09-899-046-165	Sequence 165, App
7	260.2	75.4	499	10	US-09-878-281-165	Sequence 165, App
8	260.2	75.4	499	13	US-09-873-224-165	Sequence 165, App
9	259.4	75.2	573	10	US-09-194-949-5	Sequence 5, Appli
10	254.6	73.8	499	10	US-09-899-046-163	Sequence 163, App
11	254.6	73.8	499	10	US-09-878-281-163	Sequence 163, App
12	254.6	73.8	499	13	US-09-873-224-163	Sequence 163, App
13	253.6	73.5	498	10	US-09-899-046-193	Sequence 193, App
14	253.6	73.5	498	10	US-09-878-281-193	Sequence 193, App
15	253.6	73.5	498	13	US-09-873-224-193	Sequence 193, App
16	253	73.3	2433	9	US-09-973-025-49	Sequence 49, Appl
17	253	73.3	2433	10	US-09-899-303-49	Sequence 49, Appl
18	253	73.3	2433	10	US-09-995-808-49	Sequence 49, Appl
19	253	73.3	2433	10	US-09-995-860-49	Sequence 49, Appl
20	253	73.3	2433	10	US-09-995-791-49	Sequence 49, Appl
21	253	73.3	2433	17	US-10-321-798-49	Sequence 49, Appl
22	249.8	72.4	360	13	US-09-306-780-3	Sequence 3, Appli
23	249.8	72.4	483	13	US-09-306-780-7	Sequence 7, Appli
24	249.8	72.4	843	13	US-09-306-780-11	Sequence 11, Appl
25	249.8	72.4	9413	10	US-09-827-688-6	Sequence 6, Appli
26	248.8	72.1	957	9	US-09-851-138-11	Sequence 11, Appl
27	248.2	71.9	480	15	US-10-071-867-15	Sequence 15, Appl
28	248.2	71.9	9275	15	US-10-259-275-39	Sequence 39, Appl
29	246.6	71.5	685	10	US-09-853-409-37	Sequence 37, Appl
30	246.6	71.5	685	13	US-10-457-304-37	Sequence 37, Appl
31	246.6	71.5	685	13	US-10-454-293-37	Sequence 37, Appl
32	246.6	71.5	708	16	US-10-365-620-57	Sequence 57, Appl
33	246.6	71.5	750	16	US-10-365-620-53	Sequence 53, Appl
34	246.6	71.5	1380	16	US-10-365-620-59	Sequence 59, Appl
35	246.6	71.5	1422	16	US-10-365-620-55	Sequence 55, Appl
36	246.6	71.5	9365	10	US-09-827-688-7	Sequence 7, Appli
37	246.6	71.5	9416	9	US-09-929-955-13	Sequence 13, Appl
38	246.6	71.5	9416	14	US-10-104-966-13	Sequence 13, Appl
39	246.6	71.5	9416	17	US-10-719-619-13	Sequence 13, Appl
40	246.6	71.5	9599	13	US-10-189-359-13	Sequence 13, Appl
41	246.6	71.5	9605	13	US-10-467-000-2	Sequence 2, Appli
42	246.6	71.5	9646	9	US-09-742-659-3	Sequence 3, Appli
43	246.6	71.5	9646	9	US-09-238-076-1	Sequence 1, Appli
44	246.6	71.5	9646	10	US-09-995-937-1	Sequence 1, Appli
45	246.6	71.5	9646	10	US-09-917-563-1	Sequence 1, Appli

ALIGNMENTS

RESULT 1
US-09-873-224-147
; Sequence 147, Application US/09873224
; Publication No. US20030064360A1
; GENERAL INFORMATION:
; APPLICANT: <Unknown>
; TITLE OF INVENTION: New sequences of hepatitis C virus
; genotypes for diagnosis, prophylaxis and therapy.
; NUMBER OF SEQUENCES: 270
; CORRESPONDENCE ADDRESS:
; STREET: Industriepark Zwijnaarde 7, box 4
; CITY: Ghent
; COUNTRY: Belgium
; ZIP: B-9052
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/873,224
; FILING DATE: 05-Jun-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/362,455
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Innogenetics sa.
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 00 32 9 241 07 11
; TELEFAX: 00 32 9 241 07 99
; INFORMATION FOR SEQ ID NO: 147:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 345 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear

```
;       MOLECULE TYPE: cDNA
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
;       FEATURE:
;            NAME/KEY:  CDS
;            LOCATION:  1..345
;       FEATURE:
;            NAME/KEY:  mat_peptide
;            LOCATION:  1..342
;       SEQUENCE DESCRIPTION: SEQ ID NO: 147:
US-09-873-224-147

  Query Match             100.0%;  Score 345;  DB 13;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 1e-96;
  Matches  345;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60

Qy         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120

Qy        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180

Qy        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240

Qy        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300

Qy        301 GCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 345
              |||||||||||||||||||||||||||||||||||||||||||||
Db        301 GCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 345


RESULT 2
US-09-899-046-147
; Sequence 147, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  147:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  346 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..346
;    FEATURE:
;      NAME/KEY:  mat_peptide
;      LOCATION:  1..342
US-09-899-046-147

  Query Match             96.8%;  Score 334;  DB 10;  Length 346;
  Best Local Similarity   99.7%;  Pred. No. 2.6e-93;
  Matches  345;  Conservative    0;  Mismatches    0;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||||||||||||||||||||||||||||||| ||||||||||
Db          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCSCCGGCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 345
              |||||||||||||||||||||||||||||||||||||||||||||
Db        301 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 346


RESULT 3
US-09-878-281-147
; Sequence 147, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  147:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  346 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..346
;    FEATURE:
;      NAME/KEY:  mat_peptide
;      LOCATION:  1..342
US-09-878-281-147

  Query Match             96.8%;  Score 334;  DB 10;  Length 346;
  Best Local Similarity   99.7%;  Pred. No. 2.6e-93;
```

```
  Matches  345;  Conservative    0;  Mismatches    0;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||||
Db          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCSCCGGCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 345
              |||||||||||||||||||||||||||||||||||||||||||||
Db        301 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 346


RESULT 4
US-09-851-138-49
; Sequence 49, Application US/09851138
; Publication No. US20020183508A1
;   GENERAL INFORMATION:
;        APPLICANT: MAERTENS, GEERT
;                   STUYVER, LIEVEN
;        TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;                            AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;                            AGENTS
;        NUMBER OF SEQUENCES: 207
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: ARNOLD, WHITE & DURKEE
;             STREET: P.O. BOX 4433
;             CITY: HOUSTON
;             STATE: TEXAS
;             COUNTRY: USA
;             ZIP: 77210-4433
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: Microsoft Word 6.0 / ASCII text output
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;   INFORMATION FOR SEQ ID NO: 49:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 309 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: cDNA
;        HYPOTHETICAL: NO
;        ANTI-SENSE: NO
;        SEQUENCE DESCRIPTION: SEQ ID NO: 49:
US-09-851-138-49

  Query Match             89.6%;  Score 309;  DB 9;  Length 309;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-85;
  Matches  309;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60

Qy         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120

Qy        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180

Qy        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240

Qy        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300

Qy        301 GCGGCTCTC 309
              |||||||||
Db        301 GCGGCTCTC 309


RESULT 5
US-09-851-138-59
; Sequence 59, Application US/09851138
; Publication No. US20020183508A1
;   GENERAL INFORMATION:
;        APPLICANT: MAERTENS, GEERT
;                   STUYVER, LIEVEN
;        TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;                            AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;                            AGENTS
;        NUMBER OF SEQUENCES: 207
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: ARNOLD, WHITE & DURKEE
;             STREET: P.O. BOX 4433
;             CITY: HOUSTON
;             STATE: TEXAS
;             COUNTRY: USA
;             ZIP: 77210-4433
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: Microsoft Word 6.0 / ASCII text output
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;   INFORMATION FOR SEQ ID NO: 59:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 652 base pairs
;             TYPE: nucleic acid
```

```
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;          MOLECULE TYPE: cDNA
;          HYPOTHETICAL: NO
;          ANTI-SENSE: NO
;          SEQUENCE DESCRIPTION: SEQ ID NO: 59:
US-09-851-138-59

  Query Match             75.8%;  Score 261.6;  DB 9;  Length 652;
  Best Local Similarity   86.7%;  Pred. No. 7.1e-71;
  Matches  299;  Conservative    0;  Mismatches   45;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||   |||||||| |||||||||||||||||||||||||||| ||| ||||||
Db        239 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAAAGAAACACCAACCGCCGCCCACAG 298

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| ||||| || |||||||||||||||| |||||||||| ||||||
Db        299 GACGTCAAGTTCCCGGGCGGTGGCCAGATCGTTGGTGGAGTCTACGTGCTACCGCGCAGG 358

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||    |||||||||| |||| ||| |||||||| ||||||||||||||||   |
Db        359 GGCCCTAGATTGGGTGTGCGCGCAGCGCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGG 418

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||| || |||| || ||||||| ||||||||||||||||||| |||||||||
Db        419 AGGCGCCAACCTATTCCCAAGGAGCGCCGACCCGAGGGCAGGTCCTGGGCGCAGCCCGGG 478

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||| |||||||| ||||| || ||||||||||||||||||||   ||||||||||||
Db        479 TACCCCTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGTNGGCTCCTGTCCCCT 538

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || ||    ||||| || | ||||||||||||| |||
Db        539 CGCGGCTCCCGTCCTAGTTGGGGTCCTACTGACCCCCGGCGTAGG 583


RESULT 6
US-09-899-046-165
; Sequence 165, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  165:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  499 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-09-899-046-165

  Query Match             75.4%;  Score 260.2;  DB 10;  Length 499;
  Best Local Similarity   86.3%;  Pred. No. 1.8e-70;
  Matches  297;  Conservative    0;  Mismatches   46;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              ||||||||   |||||||| |||||||||||||||| | |||||||||| | |||  | |
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCTATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||||||| |||||||||||| |||||||| || | || ||||||
Db         61 GACGTTAAGTTCCCAGGCGGTGGTCAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||  |||||||||||| ||    || |||||||| |||||||||||||||||  |
Db        121 GGCCCCAGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGG 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||| ||||||| |||||||||||||||||||||| |||||||| |||||||||
Db        181 AGGCGCCAACCTATCCCCAAGGCGCGCCGAACCGAGGGCAGATCCTGGGCGCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              || |||||||||| || || |||||||||| ||||||||||||||||||||||||||||
Db        241 TATCCTTGGCCCCTTTACGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCCCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAG 343
              ||||| |||||  |||| |||||||| ||||| |||||| | ||
Db        301 CGCGGNTCTCGGNCGTCTTGGGGCCCCAATGATCCCCGGNGGAG 344


RESULT 7
US-09-878-281-165
; Sequence 165, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  165:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  499 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-09-878-281-165

  Query Match             75.4%;  Score 260.2;  DB 10;  Length 499;
  Best Local Similarity   86.3%;  Pred. No. 1.8e-70;
  Matches  297;  Conservative    0;  Mismatches   46;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              ||||||||   |||||||| |||||||||||||||| | |||||||||| | |||  | |
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCTATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||||||| |||||||||||| |||||||| || | || ||||||
Db         61 GACGTTAAGTTCCCAGGCGGTGGTCAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||  |||||||||||| ||    || |||||||| |||||||||||||||||  |
Db        121 GGCCCCAGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGG 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||| ||||||| |||||||||||||||||||||| |||||||| |||||||||
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Db        181 AGGCGCCAACCTATCCCCAAGGCGCGCCGAACCGAGGGCAGATCCTGGGCGCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              || |||||||||| || || |||||||||| |||||||||||||||||||||||||||||
Db        241 TATCCTTGGCCCCTTTACGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCCCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAG 343
              ||||| |||||  |||| |||||||| ||||| |||||| | ||
Db        301 CGCGGNTCTCGGNCGTCTTGGGGCCCCAATGATCCCCGGNGGAG 344


RESULT 8
US-09-873-224-165
; Sequence 165, Application US/09873224
; Publication No. US20030064360A1
;   GENERAL INFORMATION:
;        APPLICANT: <Unknown>
;        TITLE OF INVENTION: New sequences of hepatitis C virus
;                            genotypes for diagnosis, prophylaxis and therapy.
;        NUMBER OF SEQUENCES: 270
;        CORRESPONDENCE ADDRESS:
;             STREET: Industriepark Zwijnaarde 7, box 4
;             CITY: Ghent
;             COUNTRY: Belgium
;             ZIP: B-9052
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/873,224
;             FILING DATE: 05-Jun-2001
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/362,455
;             FILING DATE: <Unknown>
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Innogenetics sa.
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 00 32 9 241 07 11
;             TELEFAX: 00 32 9 241 07 99
;   INFORMATION FOR SEQ ID NO: 165:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 499 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: DNA (genomic)
;        HYPOTHETICAL: NO
;        ANTI-SENSE: NO
;        SEQUENCE DESCRIPTION: SEQ ID NO: 165:
US-09-873-224-165

  Query Match             75.4%;  Score 260.2;  DB 13;  Length 499;
  Best Local Similarity   86.3%;  Pred. No. 1.8e-70;
  Matches  297;  Conservative    0;  Mismatches   46;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              ||||||||   |||||||| |||||||||||||||| | |||||||||| | ||| | |
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCTATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||||||| |||||||||||| |||||||| || | || ||||||
Db         61 GACGTTAAGTTCCCAGGCGGTGGTCAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||  |||||||||||| ||    || |||||||| ||||||||||||||||  |
Db        121 GGCCCCAGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGG 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||||| ||||||| |||||||||||||||||||| |||||||| |||||||||
Db        181 AGGCGCCAACCTATCCCCAAGGCGCGCCGAACCGAGGGCAGATCCTGGGCGCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              || |||||||||||| || || |||||||||||| |||||||||||||||||||||||||||||
Db        241 TATCCTTGGCCCCTTTACGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCCCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAG 343
              ||||| |||||  |||| |||||||| ||||| |||||| | ||
Db        301 CGCGGNTCTCGGNCGTCTTGGGGCCCCAATGATCCCCGGNGGAG 344


RESULT 9
US-09-194-949-5
; Sequence 5, Application US/09194949
; Publication No. US20030053987A1
; GENERAL INFORMATION:
;  APPLICANT:  Merck & Co., Inc.
;  APPLICANT:  Donnelly, John J.
;  APPLICANT:  Fu, Tong-Ming
;  APPLICANT:  Liu, Margaret A.
;  APPLICANT:  Shiver, John W.
;  TITLE OF INVENTION:  SYNTHETIC HEPATITIS C GENES
;  FILE REFERENCE:  19732YP
;  CURRENT APPLICATION NUMBER: US/09/194,949
;  CURRENT FILING DATE:  2000-02-17
;  PRIOR APPLICATION NUMBER:  PCT/US97/09884
;  PRIOR FILING DATE:  1997-06-06
;  PRIOR APPLICATION NUMBER:  60/020,494
;  PRIOR FILING DATE:  1996-06-11
;  PRIOR APPLICATION NUMBER:  60/033,534
;  PRIOR FILING DATE:  1996-12-20
;  NUMBER OF SEQ ID NOS:  25
;  SOFTWARE:  FastSEQ for Windows Version 4.0
; SEQ ID NO 5
;   LENGTH: 573
;   TYPE: DNA
;   ORGANISM: Hepatitis C Virus
US-09-194-949-5

  Query Match             75.2%;  Score 259.4;  DB 10;  Length 573;
  Best Local Similarity   86.4%;  Pred. No. 3.3e-70;
  Matches  298;  Conservative    0;  Mismatches   46;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||   |||||||| |||||||||||||||| | |||||||||| ||| ||||||
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| ||||| |||||||||||||||||||||| || | || ||||||
Db         61 GACGTCAAGTTCCCGGGCGGTGGTCAGATCGTTGGTGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||  |||||||||||| ||     | |||||||||||||||||||||||  |
Db        121 GGCCCCAGGTTGGGTGTGCGCGCGACTAGGAAGACTTCCGAGCGGTCGCAACCTCGTGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| || || ||||||| ||| |||||  |||||||||||||||||||||||||||||
Db        181 AGGCGACAGCCTATCCCCAAGGCTCGCCGGCCCGAGGGCAGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| |||||||||| |||||||||||| ||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGCAATGAGGGCTTCGGGTGGGCAGGATGGCTCCTGTCCCCC 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||| ||    |||||||| | |||||||||||| |||
Db        301 CGCGGCTCTCGGCCTAGTTGGGGCCCCACTGACCCCCGGCGTAGG 345


RESULT 10
US-09-899-046-163
; Sequence 163, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
```

```
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  163:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  499 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..499
;    FEATURE:
;      NAME/KEY:  mat_peptide
;      LOCATION:  1..496
US-09-899-046-163

  Query Match             73.8%;  Score 254.6;  DB 10;  Length 499;
  Best Local Similarity   85.5%;  Pred. No. 9.9e-69;
  Matches  295;  Conservative    0;  Mismatches   49;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              ||||||||   ||||||||  |||||||||||||||| | |||||||||| | ||| || |
Db          1 ATGAGCACGAATCCTAAACTTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCCATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||| || || || |||||||||| |||||||| || | || ||||||
Db         61 GACGTTAAGTTCCCGGGTGGTGGCCAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||   |||||||||||| ||    || |||||||| ||||||||||||||||||   |
Db        121 GGCCCTAGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGG 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||| ||||||| |||||||||| |||||||||| |||||||| |||||||||
Db        181 AGGCGCCAACCTATCCCCAAGGCGCGCCGATCCGAGGGCAGATCCTGGGCGCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              || |||||||||| || || |||||||||| ||||||||||||||||||||||||||||
Db        241 TATCCTTGGCCCCTTTACGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCCCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||| ||||| ||||| |||||||| ||||| |||||||| |||
Db        301 CGCGGGTCTCGGCCGTCTTGGGGCCCTAATGATCCCCGGCGGAGG 345


RESULT 11
US-09-878-281-163
; Sequence 163, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  163:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  499 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..499
;    FEATURE:
;      NAME/KEY:  mat_peptide
;      LOCATION:  1..496
US-09-878-281-163

  Query Match             73.8%;  Score 254.6;  DB 10;  Length 499;
  Best Local Similarity   85.5%;  Pred. No. 9.9e-69;
  Matches  295;  Conservative    0;  Mismatches   49;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              ||||||||   ||||||||  |||||||||||||||| | |||||||||| | ||| || |
Db          1 ATGAGCACGAATCCTAAACTTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCCATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||| || || || |||||||||| |||||||| || | || ||||||
Db         61 GACGTTAAGTTCCCGGGTGGTGGCCAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||   |||||||||||| ||    || |||||||| ||||||||||||||||||   |
Db        121 GGCCCTAGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGG 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||| ||||||| |||||||||| |||||||||| |||||||| |||||||||
Db        181 AGGCGCCAACCTATCCCCAAGGCGCGCCGATCCGAGGGCAGATCCTGGGCGCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              || |||||||||| || || |||||||||| ||||||||||||||||||||||||||||
Db        241 TATCCTTGGCCCCTTTACGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCCCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||| ||||| ||||| |||||||| ||||| |||||||| |||
Db        301 CGCGGGTCTCGGCCGTCTTGGGGCCCTAATGATCCCCGGCGGAGG 345


RESULT 12
US-09-873-224-163
; Sequence 163, Application US/09873224
; Publication No. US20030064360A1
;  GENERAL INFORMATION:
;       APPLICANT: <Unknown>
;       TITLE OF INVENTION: New sequences of hepatitis C virus
;                           genotypes for diagnosis, prophylaxis and therapy.
;       NUMBER OF SEQUENCES: 270
;       CORRESPONDENCE ADDRESS:
;            STREET: Industriepark Zwijnaarde 7, box 4
;            CITY: Ghent
;            COUNTRY: Belgium
;            ZIP: B-9052
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
;       CURRENT APPLICATION DATA:
```

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;             APPLICATION NUMBER: US/09/873,224
;             FILING DATE: 05-Jun-2001
;             CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/362,455
;             FILING DATE: <Unknown>
;       ATTORNEY/AGENT INFORMATION:
;             NAME: Innogenetics sa.
;       TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 00 32 9 241 07 11
;             TELEFAX: 00 32 9 241 07 99
;   INFORMATION FOR SEQ ID NO: 163:
;       SEQUENCE CHARACTERISTICS:
;             LENGTH: 499 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;       MOLECULE TYPE: cDNA
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
;       FEATURE:
;             NAME/KEY: CDS
;             LOCATION: 1..499
;       FEATURE:
;             NAME/KEY: mat_peptide
;             LOCATION: 1..496
;       SEQUENCE DESCRIPTION: SEQ ID NO: 163:
US-09-873-224-163

  Query Match             73.8%;  Score 254.6;  DB 13;  Length 499;
  Best Local Similarity   85.5%;  Pred. No. 9.9e-69;
  Matches  295;  Conservative    0;  Mismatches   49;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              ||||||||  ||||||||  |||||||||||||| | |||||||||| | ||| || |
Db          1 ATGAGCACGAATCCTAAACTTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCCATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||| || || || |||||||||| ||||||||| || | || ||||||
Db         61 GACGTTAAGTTCCCGGGTGGTGGCCAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||  |||||||||||| ||    || |||||||| |||||||||||||||||  |
Db        121 GGCCCTAGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGG 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||| ||||||| |||||||||| |||||||||| |||||||| |||||||||
Db        181 AGGCGCCAACCTATCCCCAAGGCGCGCCGATCCGAGGGCAGATCCTGGGCGCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              || |||||||||| || || |||||||||| ||||||||||||||||||||||||||||
Db        241 TATCCTTGGCCCCTTTACGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCCCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||| ||||| ||||| |||||||| ||||| |||||||| |||
Db        301 CGCGGGTCTCGGCCGTCTTGGGGCCCTAATGATCCCCGGCGGAGG 345


RESULT 13
US-09-899-046-193
; Sequence 193, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  193:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  498 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..498
;    FEATURE:
;      NAME/KEY:  mat_peptide
;      LOCATION:  1..495
US-09-899-046-193

  Query Match             73.5%;  Score 253.6;  DB 10;  Length 498;
  Best Local Similarity   85.5%;  Pred. No. 2e-68;
  Matches  294;  Conservative    0;  Mismatches   49;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              ||||||||  ||||||||| |||||||||||||| | |||||||||| | |||  | |
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCTATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| |||| || |||||||||| |||||||| || | || ||||||
Db         61 GACGTAAAGTTCCCGGGCGGTGGACAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||| |||||||||||| ||    || |||||||| |||||||||||||||||  |
Db        121 GGCCCCCGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGC 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| ||||| ||||||| |||||||||  |||||||||||||||||||| ||  |||||
Db        181 AGGCGTCAACCTATCCCCAAGGCGCGCCGGTCCGAGGGCAGGTCCTGGGCGCAAGCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||| |||||||| |||| |||||||||| |||||||||||||||||||||||| ||
Db        241 TACCCCTGGCCCCTCTATGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCTCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAG 343
              |||||||||| || || |||||||||||||| |||||||| ||
Db        301 CGCGGCTCTCGGCCATCTTGGGGCCCAAATGATCCCCGGCGGAG 344


RESULT 14
US-09-878-281-193
; Sequence 193, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  193:
;    SEQUENCE CHARACTERISTICS:
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```
;      LENGTH:  498 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..498
;    FEATURE:
;      NAME/KEY:  mat_peptide
;      LOCATION:  1..495
US-09-878-281-193

  Query Match             73.5%;  Score 253.6;  DB 10;  Length 498;
  Best Local Similarity   85.5%;  Pred. No. 2e-68;
  Matches  294;  Conservative    0;  Mismatches   49;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              ||||||||   |||||||||| |||||||||||||| | |||||||||| | |||  | |
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCTATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| ||||| || |||||||||||| |||||||| || | || ||||||
Db         61 GACGTAAAGTTCCCGGGCGGTGGACAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||| |||||||||||| ||    || |||||||| |||||||||||||||||   |
Db        121 GGCCCCCGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGC 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| ||||| ||||||| ||||||||  |||||||||||||||||||| ||  |||||
Db        181 AGGCGTCAACCTATCCCCAAGGCGCGCCGGTCCGAGGGCAGGTCCTGGGCGCAAGCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||| |||||||| ||||| |||||||||| |||||||||||||||||||||||||| ||
Db        241 TACCCCTGGCCCCTCTATGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCTCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAG 343
              |||||||||| || || |||||||||||||| |||||||| ||
Db        301 CGCGGCTCTCGGCCATCTTGGGGCCCAAATGATCCCCGGCGGAG 344


RESULT 15
US-09-873-224-193
; Sequence 193, Application US/09873224
; Publication No. US20030064360A1
;   GENERAL INFORMATION:
;        APPLICANT: <Unknown>
;        TITLE OF INVENTION: New sequences of hepatitis C virus
;                            genotypes for diagnosis, prophylaxis and therapy.
;        NUMBER OF SEQUENCES: 270
;        CORRESPONDENCE ADDRESS:
;             STREET: Industriepark Zwijnaarde 7, box 4
;             CITY: Ghent
;             COUNTRY: Belgium
;             ZIP: B-9052
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/873,224
;             FILING DATE: 05-Jun-2001
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/362,455
;             FILING DATE: <Unknown>
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Innogenetics sa.
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 00 32 9 241 07 11
;             TELEFAX: 00 32 9 241 07 99
;   INFORMATION FOR SEQ ID NO: 193:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 498 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: cDNA
;        HYPOTHETICAL: NO
;        ANTI-SENSE: NO
;        FEATURE:
;             NAME/KEY:  CDS
;             LOCATION:  1..498
;        FEATURE:
;             NAME/KEY:  mat_peptide
;             LOCATION:  1..495
;        SEQUENCE DESCRIPTION: SEQ ID NO: 193:
US-09-873-224-193

  Query Match             73.5%;  Score 253.6;  DB 13;  Length 498;
  Best Local Similarity   85.5%;  Pred. No. 2e-68;
  Matches  294;  Conservative    0;  Mismatches   49;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              ||||||||   |||||||||| |||||||||||||| | |||||||||| | |||  | |
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCTATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| ||||| || |||||||||||| |||||||| || | || ||||||
Db         61 GACGTAAAGTTCCCGGGCGGTGGACAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||| |||||||||||| ||    || |||||||| |||||||||||||||||   |
Db        121 GGCCCCCGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGC 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| ||||| ||||||| ||||||||  |||||||||||||||||||| ||  |||||
Db        181 AGGCGTCAACCTATCCCCAAGGCGCGCCGGTCCGAGGGCAGGTCCTGGGCGCAAGCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||| |||||||| ||||| |||||||||| |||||||||||||||||||||||||| ||
Db        241 TACCCCTGGCCCCTCTATGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCTCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAG 343
              |||||||||| || || |||||||||||||| |||||||| ||
Db        301 CGCGGCTCTCGGCCATCTTGGGGCCCAAATGATCCCCGGCGGAG 344


Search completed: August 17, 2004, 13:18:44
Job time : 357 secs
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GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: August 17, 2004, 12:08:31 ; Search time 82 Seconds
(without alignments)
2334.854 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 345
Sequence: 1 atgagcacacttcctaaacc.....aaatgacccccggcgcagga 345

Scoring table: OLIGO_NUC
Gapop 60.0 , Gapext 60.0

Searched: 682709 seqs, 277475446 residues

Word size : 0

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/2/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	309	89.6	309	3	US-08-836-075A-49	Sequence 49, Appl
2	43	12.5	549	3	US-08-441-971-60	Sequence 60, Appl
3	43	12.5	549	3	US-08-221-653-60	Sequence 60, Appl
4	43	12.5	549	3	US-08-442-144A-60	Sequence 60, Appl
5	43	12.5	549	3	US-08-441-970-60	Sequence 60, Appl
6	43	12.5	573	2	US-08-290-665A-141	Sequence 141, App
7	43	12.5	573	4	US-09-194-949A-5	Sequence 5, Appli
8	43	12.5	573	5	PCT-US95-10398-141	Sequence 141, App
9	43	12.5	831	3	US-08-836-075A-65	Sequence 65, Appl
10	40	11.6	573	2	US-08-290-665A-142	Sequence 142, App
11	40	11.6	573	5	PCT-US95-10398-142	Sequence 142, App
12	38	11.0	573	2	US-08-290-665A-136	Sequence 136, App
13	38	11.0	573	5	PCT-US95-10398-136	Sequence 136, App
14	35	10.1	573	2	US-08-290-665A-137	Sequence 137, App
15	35	10.1	573	2	US-08-290-665A-138	Sequence 138, App
16	35	10.1	573	2	US-08-290-665A-139	Sequence 139, App
17	35	10.1	573	5	PCT-US95-10398-137	Sequence 137, App
18	35	10.1	573	5	PCT-US95-10398-138	Sequence 138, App
19	35	10.1	573	5	PCT-US95-10398-139	Sequence 139, App
20	35	10.1	803	1	US-08-157-235-1	Sequence 1, Appli
21	35	10.1	803	1	US-08-157-235-2	Sequence 2, Appli
22	35	10.1	803	1	US-08-157-235-3	Sequence 3, Appli
23	35	10.1	803	1	US-08-157-235-4	Sequence 4, Appli
24	34	9.9	573	2	US-08-290-665A-135	Sequence 135, App
25	34	9.9	573	5	PCT-US95-10398-135	Sequence 135, App
26	34	9.9	803	1	US-08-157-235-5	Sequence 5, Appli
27	31	9.0	183	1	US-07-681-703B-21	Sequence 21, Appl
28	31	9.0	183	2	US-08-407-410B-21	Sequence 21, Appl
29	31	9.0	183	2	US-08-485-500-21	Sequence 21, Appl
30	31	9.0	183	5	PCT-US91-02370-21	Sequence 21, Appl
31	31	9.0	270	1	US-07-681-703B-23	Sequence 23, Appl
32	31	9.0	270	2	US-08-407-410B-23	Sequence 23, Appl
33	31	9.0	270	2	US-08-485-500-23	Sequence 23, Appl
34	31	9.0	270	5	PCT-US91-02370-23	Sequence 23, Appl
35	31	9.0	273	1	US-07-681-703B-19	Sequence 19, Appl
36	31	9.0	273	2	US-08-407-410B-19	Sequence 19, Appl
37	31	9.0	273	2	US-08-485-500-19	Sequence 19, Appl
38	31	9.0	273	5	PCT-US91-02370-19	Sequence 19, Appl
39	31	9.0	306	2	US-08-537-811-35	Sequence 35, Appl
40	31	9.0	327	3	US-08-836-075A-1	Sequence 1, Appli
41	31	9.0	355	3	US-08-444-818-104	Sequence 104, App
42	31	9.0	355	3	US-08-444-818-106	Sequence 106, App
43	31	9.0	360	1	US-07-681-703B-17	Sequence 17, Appl
44	31	9.0	360	2	US-08-407-410B-17	Sequence 17, Appl
45	31	9.0	360	2	US-08-485-500-17	Sequence 17, Appl

ALIGNMENTS

```
RESULT 1
US-08-836-075A-49
; Sequence 49, Application US/08836075A
; Patent No. 6180768
;  GENERAL INFORMATION:
;    APPLICANT:  MAERTENS, GEERT
;    APPLICANT:  STUYVER, LIEVEN
;    TITLE OF INVENTION:  NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;    TITLE OF INVENTION:  AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;    TITLE OF INVENTION:  AGENTS
;    NUMBER OF SEQUENCES:  207
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  ARNOLD, WHITE & DURKEE
;      STREET:  P.O. BOX 4433
;      CITY:  HOUSTON
;      STATE:  TEXAS
;      COUNTRY:  USA
;      ZIP:  77210-4433
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  Microsoft Word 6.0 / ASCII text output
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/836,075A
;      FILING DATE:  21 Apr 1997
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/EP95/04155
;      FILING DATE:  23 Oct 1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  EP 94870166.9
;      FILING DATE:  21 Oct 1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  EP 95870076.7
;      FILING DATE:  28 Jun 1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  KAMMERER, PATRICIA A.
;      REGISTRATION NUMBER:  29,775
;      REFERENCE/DOCKET NUMBER:  INNS:004
;  INFORMATION FOR SEQ ID NO:  49:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  309 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-836-075A-49
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  Query Match             89.6%;  Score 309;  DB 3;  Length 309;
  Best Local Similarity   100.0%;  Pred. No. 9.2e-147;
  Matches  309;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60

Qy         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120

Qy        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180

Qy        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240

Qy        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300

Qy        301 GCGGCTCTC 309
              |||||||||
Db        301 GCGGCTCTC 309


RESULT 2
US-08-441-971-60
; Sequence 60, Application US/08441971
; Patent No. 6071693
;  GENERAL INFORMATION:
;    APPLICANT:  Tai-An Cha
;    TITLE OF INVENTION:  HCV GENOMIC SEQUENCES FOR
;    TITLE OF INVENTION:  DIAGNOSTICS AND THERAPEUTICS
;    NUMBER OF SEQUENCES:  147
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Wolf, Greenfield & Sacks, P.C.
;      STREET:  600 Atlantic Avenue
;      CITY:  Boston
;      STATE:  Massachusetts
;      COUNTRY:  USA
;      ZIP:  02210
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 5.25 inch
;      COMPUTER:  IBM compatible
;      OPERATING SYSTEM:  MS-DOS Version 3.3
;      SOFTWARE:  WordPerfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/441,971
;      FILING DATE:  16-MAY-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/221,653
;      FILING DATE:
;      APPLICATION NUMBER:  US/07/881,528
;      FILING DATE:
;      APPLICATION NUMBER:  07/697,326
;      FILING DATE:  8 May 1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Janiuk, Anthony J.
;      REGISTRATION NUMBER:  29,809
;      REFERENCE/DOCKET NUMBER:  C0772/7000
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 720-3500
;      TELEFAX:  (617) 720-2441
;      TELEX:  EZEKIEL
;  INFORMATION FOR SEQ ID NO:  60:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  549 nucleotides
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  nac5
US-08-441-971-60

  Query Match             12.5%;  Score 43;  DB 3;  Length 549;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 3
US-08-221-653-60
; Sequence 60, Application US/08221653
; Patent No. 6190864
;  GENERAL INFORMATION:
;    APPLICANT:  Tai-An Cha
;    TITLE OF INVENTION:  HCV GENOMIC SEQUENCES FOR
;    TITLE OF INVENTION:  DIAGNOSTICS AND THERAPEUTICS
;    NUMBER OF SEQUENCES:  147
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Wolf, Greenfield & Sacks, P.C.
;      STREET:  600 Atlantic Avenue
;      CITY:  Boston
;      STATE:  Massachusetts
;      COUNTRY:  USA
;      ZIP:  02210
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 5.25 inch
;      COMPUTER:  IBM compatible
;      OPERATING SYSTEM:  MS-DOS Version 3.3
;      SOFTWARE:  WordPerfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/221,653
;      FILING DATE:
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/07/881,528
;      FILING DATE:
;      APPLICATION NUMBER:  07/697,326
;      FILING DATE:  8 May 1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Janiuk, Anthony J.
;      REGISTRATION NUMBER:  29,809
;      REFERENCE/DOCKET NUMBER:  C0772/7000
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 720-3500
;      TELEFAX:  (617) 720-2441
;      TELEX:  EZEKIEL
;  INFORMATION FOR SEQ ID NO:  60:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  549 nucleotides
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  nac5
US-08-221-653-60

  Query Match             12.5%;  Score 43;  DB 3;  Length 549;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254
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RESULT 4
US-08-442-144A-60
; Sequence 60, Application US/08442144A
; Patent No. 6214583
;  GENERAL INFORMATION:
;    APPLICANT:  Tai-An Cha
;    APPLICANT:  Eileen Beall
;    APPLICANT:  Bruce Irvine
;    APPLICANT:  Janice Kolberg
;    APPLICANT:  Michael S. Urdea
;    TITLE OF INVENTION:  HCV GENOMIC SEQUENCES FOR
;    TITLE OF INVENTION:  DIAGNOSTICS AND THERAPEUTICS
;    NUMBER OF SEQUENCES:  148
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Chiron Corporation
;      STREET:  4560 Horton Street
;      CITY:  Emeryville
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  94608-2916
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.5 Inch
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  Windows NT
;      SOFTWARE:  Microsoft Word 97
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/442,144A
;      FILING DATE:  MAY 16, 1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/221,653
;      FILING DATE:  APRIL 1, 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Doreen Yatko Trujillo
;      REGISTRATION NUMBER:  35,719
;      REFERENCE/DOCKET NUMBER:  CHIR-0121
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  215-568-3100
;      TELEFAX:  215-568-3439
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  60:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  549 Nucleotides
;      TYPE:  Nucleic Acid
;      STRANDEDNESS:  Single
;      TOPOLOGY:  Linear
;    MOLECULE TYPE:  DNA
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  nac5
US-08-442-144A-60

  Query Match             12.5%;  Score 43;  DB 3;  Length 549;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 5
US-08-441-970-60
; Sequence 60, Application US/08441970
; Patent No. 6297370
;  GENERAL INFORMATION:
;    APPLICANT:  Tai-An Cha
;    TITLE OF INVENTION:  HCV GENOMIC SEQUENCES FOR
;    TITLE OF INVENTION:  DIAGNOSTICS AND THERAPEUTICS
;    NUMBER OF SEQUENCES:  147
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Wolf, Greenfield & Sacks, P.C.
;      STREET:  600 Atlantic Avenue
;      CITY:  Boston
;      STATE:  Massachusetts
;      COUNTRY:  USA
;      ZIP:  02210
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 5.25 inch
;      COMPUTER:  IBM compatible
;      OPERATING SYSTEM:  MS-DOS Version 3.3
;      SOFTWARE:  WordPerfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/441,970
;      FILING DATE:  16-MAY-1995
;      CLASSIFICATION:  536
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/881,528
;      FILING DATE:  08-MAY-1992
;      APPLICATION NUMBER:  07/697,326
;      FILING DATE:  8 May 1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Janiuk, Anthony J.
;      REGISTRATION NUMBER:  29,809
;      REFERENCE/DOCKET NUMBER:  C0772/7000
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 720-3500
;      TELEFAX:  (617) 720-2441
;      TELEX:  EZEKIEL
;  INFORMATION FOR SEQ ID NO:  60:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  549 nucleotides
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  nac5
US-08-441-970-60

  Query Match             12.5%;  Score 43;  DB 3;  Length 549;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 6
US-08-290-665A-141
; Sequence 141, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
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;       FILING DATE:  15-AUG-1994
;       CLASSIFICATION:  435
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  141:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  573 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  Z1
US-08-290-665A-141

  Query Match             12.5%;  Score 43;  DB 2;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 7
US-09-194-949A-5
; Sequence 5, Application US/09194949A
; Patent No. 6653125
; GENERAL INFORMATION:
;  APPLICANT: Merck & Co., Inc.
;  APPLICANT:  Donnelly, John J.
;  APPLICANT:  Fu, Tong-Ming
;  APPLICANT:  Liu, Margaret A.
;  APPLICANT:  Shiver, John W.
;  TITLE OF INVENTION: SYNTHETIC HEPATITIS C GENES
;  FILE REFERENCE: 19732YP
;  CURRENT APPLICATION NUMBER: US/09/194,949A
;  CURRENT FILING DATE:  2000-02-17
;  PRIOR APPLICATION NUMBER: PCT/US97/09884
;  PRIOR FILING DATE: 1997-06-06
;  PRIOR APPLICATION NUMBER: 60/020,494
;  PRIOR FILING DATE: 1996-06-11
;  PRIOR APPLICATION NUMBER: 60/033,534
;  PRIOR FILING DATE: 1996-12-20
;  PRIOR APPLICATION NUMBER: 08/865,823
;  PRIOR FILING DATE: 1997-05-30
;  NUMBER OF SEQ ID NOS: 25
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 5
;   LENGTH: 573
;   TYPE: DNA
;   ORGANISM: Hepatitis C Virus
US-09-194-949A-5

  Query Match             12.5%;  Score 43;  DB 4;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 8
PCT-US95-10398-141
; Sequence 141, Application PC/TUS9510398
;  GENERAL INFORMATION:
;     APPLICANT:  BUKH, J., MILLER, R.H. AND
;     APPLICANT:  PURCELL, R.H.
;     TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;     TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;     TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;     TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;     TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;     NUMBER OF SEQUENCES:  263
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  MORGAN & FINNEGAN
;       STREET:  345 PARK AVENUE
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
;       ZIP:  10154
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  FLOPPY DISK
;       COMPUTER:  IBM PC COMPATIBLE
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  WORDPERFECT 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/US95/10398
;       FILING DATE:  15-AUG-1995
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/086,428
;       FILING DATE:  29 JUNE 1993
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/290/665
;       FILING DATE:  15 AUGUST 1994
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  141:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  573 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  Z1
PCT-US95-10398-141

  Query Match             12.5%;  Score 43;  DB 5;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 9
US-08-836-075A-65
; Sequence 65, Application US/08836075A
; Patent No. 6180768
;  GENERAL INFORMATION:
;     APPLICANT:  MAERTENS, GEERT
;     APPLICANT:  STUYVER, LIEVEN
;     TITLE OF INVENTION:  NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;     TITLE OF INVENTION:  AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;     TITLE OF INVENTION:  AGENTS
;     NUMBER OF SEQUENCES:  207
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  ARNOLD, WHITE & DURKEE
;       STREET:  P.O. BOX 4433
;       CITY:  HOUSTON
```

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;       STATE:  TEXAS
;       COUNTRY:  USA
;       ZIP:  77210-4433
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  Microsoft Word 6.0 / ASCII text output
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/836,075A
;       FILING DATE:  21 Apr 1997
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/EP95/04155
;       FILING DATE:  23 Oct 1995
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  EP 94870166.9
;       FILING DATE:  21 Oct 1994
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  EP 95870076.7
;       FILING DATE:  28 Jun 1995
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  KAMMERER, PATRICIA A.
;       REGISTRATION NUMBER:  29,775
;       REFERENCE/DOCKET NUMBER:  INNS:004
;   INFORMATION FOR SEQ ID NO:  65:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  831 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
US-08-836-075A-65

  Query Match             12.5%;  Score 43;  DB 3;  Length 831;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        227 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 269


RESULT 10
US-08-290-665A-142
; Sequence 142, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;     APPLICANT:  BUKH, J., MILLER, R.H. AND
;     APPLICANT:  PURCELL, R.H.
;     TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;     TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;     TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;     TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;     TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;     NUMBER OF SEQUENCES:  263
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  MORGAN & FINNEGAN
;       STREET:  345 PARK AVENUE
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
;       ZIP:  10154
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  FLOPPY DISK
;       COMPUTER:  IBM PC COMPATIBLE
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  WORDPERFECT 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/290,665A
;       FILING DATE:  15-AUG-1994
;       CLASSIFICATION:  435
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  142:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  573 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  Z5
US-08-290-665A-142

  Query Match             11.6%;  Score 40;  DB 2;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 7e-11;
  Matches   40;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCC 250
              ||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCC 251


RESULT 11
PCT-US95-10398-142
; Sequence 142, Application PC/TUS9510398
;  GENERAL INFORMATION:
;     APPLICANT:  BUKH, J., MILLER, R.H. AND
;     APPLICANT:  PURCELL, R.H.
;     TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;     TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;     TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;     TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;     TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;     NUMBER OF SEQUENCES:  263
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  MORGAN & FINNEGAN
;       STREET:  345 PARK AVENUE
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
;       ZIP:  10154
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  FLOPPY DISK
;       COMPUTER:  IBM PC COMPATIBLE
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  WORDPERFECT 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/US95/10398
;       FILING DATE:  15-AUG-1995
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/086,428
;       FILING DATE:  29 JUNE 1993
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/290/665
;       FILING DATE:  15 AUGUST 1994
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  142:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  573 base pairs
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;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  Z5
PCT-US95-10398-142

  Query Match             11.6%;  Score 40;  DB 5;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 7e-11;
  Matches   40;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCC 250
              ||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCC 251


RESULT 12
US-08-290-665A-136
; Sequence 136, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  136:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S52
US-08-290-665A-136

  Query Match             11.0%;  Score 38;  DB 2;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 7.2e-10;
  Matches   38;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        261 AATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCC 298
              ||||||||||||||||||||||||||||||||||||||
Db        262 AATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCC 299


RESULT 13
PCT-US95-10398-136
; Sequence 136, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  136:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S52
PCT-US95-10398-136

  Query Match             11.0%;  Score 38;  DB 5;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 7.2e-10;
  Matches   38;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        261 AATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCC 298
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Db        262 AATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCC 299


RESULT 14
US-08-290-665A-137
; Sequence 137, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
```

```
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  137:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S2
US-08-290-665A-137

  Query Match             10.1%;  Score 35;  DB 2;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-08;
  Matches   35;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        264 GAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCC 298
              ||||||||||||||||||||||||||||||||||
Db        265 GAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCC 299


RESULT 15
US-08-290-665A-138
; Sequence 138, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  138:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  DK12
US-08-290-665A-138

  Query Match             10.1%;  Score 35;  DB 2;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-08;
  Matches   35;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        264 GAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCC 298
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Db        265 GAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCC 299


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Job time : 83 secs
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GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: August 17, 2004, 13:12:42 ; Search time 356 Seconds
(without alignments)
4754.999 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 345
Sequence: 1 atgagcacacttcctaaacc.....aaatgacccccggcgcagga 345

Scoring table: OLIGO_NUC
Gapop 60.0 , Gapext 60.0

Searched: 3225727 seqs, 2453303834 residues

Word size : 0

Total number of hits satisfying chosen parameters: 6451454

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : Published_Applications_NA:*
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9: /cgn2_6/ptodata/2/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq2:*
14: /cgn2_6/ptodata/2/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/US10C_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
18: /cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq:*
19: /cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	345	100.0	345	13	US-09-873-224-147	Sequence 147, App
2	309	89.6	309	9	US-09-851-138-49	Sequence 49, Appl
3	296	85.8	346	10	US-09-899-046-147	Sequence 147, App
4	296	85.8	346	10	US-09-878-281-147	Sequence 147, App
5	43	12.5	573	10	US-09-194-949-5	Sequence 5, Appli
6	43	12.5	831	9	US-09-851-138-65	Sequence 65, Appl
7	31	9.0	152	9	US-09-921-397-39	Sequence 39, Appl
8	31	9.0	234	9	US-09-921-397-41	Sequence 41, Appl
9	31	9.0	300	15	US-10-071-867-16	Sequence 16, Appl
10	31	9.0	310	9	US-09-921-397-114	Sequence 114, App
11	31	9.0	327	9	US-09-851-138-1	Sequence 1, Appli
12	31	9.0	339	9	US-09-921-397-115	Sequence 115, App
13	31	9.0	360	13	US-09-306-780-3	Sequence 3, Appli
14	31	9.0	450	13	US-09-306-780-5	Sequence 5, Appli
15	31	9.0	480	15	US-10-071-867-15	Sequence 15, Appl
16	31	9.0	483	13	US-09-306-780-7	Sequence 7, Appli
17	31	9.0	528	13	US-09-306-780-19	Sequence 19, Appl
18	31	9.0	540	16	US-10-150-283-2	Sequence 2, Appli
19	31	9.0	573	13	US-09-306-780-9	Sequence 9, Appli
20	31	9.0	708	16	US-10-365-620-57	Sequence 57, Appl
21	31	9.0	750	16	US-10-365-620-53	Sequence 53, Appl
22	31	9.0	843	13	US-09-306-780-11	Sequence 11, Appl
23	31	9.0	1380	16	US-10-365-620-59	Sequence 59, Appl
24	31	9.0	1422	16	US-10-365-620-55	Sequence 55, Appl
25	31	9.0	2025	13	US-10-387-336-8	Sequence 8, Appli
26	31	9.0	2031	13	US-10-387-336-7	Sequence 7, Appli
27	31	9.0	2433	9	US-09-973-025-49	Sequence 49, Appl
28	31	9.0	2433	10	US-09-899-303-49	Sequence 49, Appl
29	31	9.0	2433	10	US-09-995-808-49	Sequence 49, Appl
30	31	9.0	2433	10	US-09-995-860-49	Sequence 49, Appl
31	31	9.0	2433	10	US-09-995-791-49	Sequence 49, Appl
32	31	9.0	2433	17	US-10-321-798-49	Sequence 49, Appl
33	31	9.0	9365	10	US-09-827-688-7	Sequence 7, Appli
34	31	9.0	9379	9	US-09-916-359-1	Sequence 1, Appli
35	31	9.0	9401	17	US-10-445-724-1	Sequence 1, Appli
36	31	9.0	9413	10	US-09-827-688-6	Sequence 6, Appli
37	31	9.0	9416	9	US-09-238-076-19	Sequence 19, Appl
38	31	9.0	9416	9	US-09-929-955-13	Sequence 13, Appl
39	31	9.0	9416	10	US-09-995-937-19	Sequence 19, Appl
40	31	9.0	9416	10	US-09-917-563-19	Sequence 19, Appl
41	31	9.0	9416	14	US-10-104-966-13	Sequence 13, Appl
42	31	9.0	9416	17	US-10-719-619-13	Sequence 13, Appl
43	31	9.0	9599	13	US-10-189-359-13	Sequence 13, Appl
44	31	9.0	9622	17	US-10-475-989-2	Sequence 2, Appli
45	31	9.0	9646	9	US-09-742-659-3	Sequence 3, Appli

ALIGNMENTS

```
RESULT 1
US-09-873-224-147
; Sequence 147, Application US/09873224
; Publication No. US20030064360A1
;  GENERAL INFORMATION:
;       APPLICANT: <Unknown>
;       TITLE OF INVENTION: New sequences of hepatitis C virus
;                           genotypes for diagnosis, prophylaxis and therapy.
;       NUMBER OF SEQUENCES: 270
;       CORRESPONDENCE ADDRESS:
;            STREET: Industriepark Zwijnaarde 7, box 4
;            CITY: Ghent
;            COUNTRY: Belgium
;            ZIP: B-9052
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/873,224
;            FILING DATE: 05-Jun-2001
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 08/362,455
;            FILING DATE: <Unknown>
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Innogenetics sa.
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 00 32 9 241 07 11
;            TELEFAX: 00 32 9 241 07 99
;  INFORMATION FOR SEQ ID NO: 147:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 345 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
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;       MOLECULE TYPE: cDNA
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
;       FEATURE:
;            NAME/KEY:  CDS
;            LOCATION:  1..345
;       FEATURE:
;            NAME/KEY:  mat_peptide
;            LOCATION:  1..342
;       SEQUENCE DESCRIPTION: SEQ ID NO: 147:
US-09-873-224-147

  Query Match             100.0%;  Score 345;  DB 13;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 5e-171;
  Matches  345;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60

Qy         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120

Qy        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180

Qy        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240

Qy        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300

Qy        301 GCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 345
              |||||||||||||||||||||||||||||||||||||||||||||
Db        301 GCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 345


RESULT 2
US-09-851-138-49
; Sequence 49, Application US/09851138
; Publication No. US20020183508A1
;   GENERAL INFORMATION:
;        APPLICANT: MAERTENS, GEERT
;                   STUYVER, LIEVEN
;        TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;                            AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;                            AGENTS
;        NUMBER OF SEQUENCES: 207
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: ARNOLD, WHITE & DURKEE
;             STREET: P.O. BOX 4433
;             CITY: HOUSTON
;             STATE: TEXAS
;             COUNTRY: USA
;             ZIP: 77210-4433
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: Microsoft Word 6.0 / ASCII text output
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;   INFORMATION FOR SEQ ID NO: 49:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 309 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: cDNA
;        HYPOTHETICAL: NO
;        ANTI-SENSE: NO
;        SEQUENCE DESCRIPTION: SEQ ID NO: 49:
US-09-851-138-49

  Query Match             89.6%;  Score 309;  DB 9;  Length 309;
  Best Local Similarity   100.0%;  Pred. No. 4.2e-152;
  Matches  309;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60

Qy         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120

Qy        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180

Qy        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240

Qy        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300

Qy        301 GCGGCTCTC 309
              |||||||||
Db        301 GCGGCTCTC 309


RESULT 3
US-09-899-046-147
; Sequence 147, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  147:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  346 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
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;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..346
;    FEATURE:
;      NAME/KEY:  mat_peptide
;      LOCATION:  1..342
US-09-899-046-147

  Query Match             85.8%;  Score 296;  DB 10;  Length 346;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-145;
  Matches  296;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          50 CCGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCT 109
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          51 CCGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCT 110

Qy         110 ACCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCA 169
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         111 ACCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCA 170

Qy         170 ACCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGC 229
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         171 ACCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGC 230

Qy         230 TCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCT 289
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         231 TCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCT 290

Qy         290 CCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 345
               |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         291 CCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 346


RESULT 4
US-09-878-281-147
; Sequence 147, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  147:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  346 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..346
;    FEATURE:
;      NAME/KEY:  mat_peptide
;      LOCATION:  1..342
US-09-878-281-147

  Query Match             85.8%;  Score 296;  DB 10;  Length 346;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-145;
  Matches  296;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          50 CCGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCT 109
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          51 CCGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCT 110

Qy         110 ACCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCA 169
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         111 ACCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCA 170

Qy         170 ACCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGC 229
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         171 ACCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGC 230

Qy         230 TCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCT 289
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         231 TCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCT 290

Qy         290 CCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 345
               |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         291 CCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 346


RESULT 5
US-09-194-949-5
; Sequence 5, Application US/09194949
; Publication No. US20030053987A1
; GENERAL INFORMATION:
;  APPLICANT:  Merck & Co., Inc.
;  APPLICANT:  Donnelly, John J.
;  APPLICANT:  Fu, Tong-Ming
;  APPLICANT:  Liu, Margaret A.
;  APPLICANT:  Shiver, John W.
;  TITLE OF INVENTION:  SYNTHETIC HEPATITIS C GENES
;  FILE REFERENCE:  19732YP
;  CURRENT APPLICATION NUMBER: US/09/194,949
;  CURRENT FILING DATE:  2000-02-17
;  PRIOR APPLICATION NUMBER:  PCT/US97/09884
;  PRIOR FILING DATE:  1997-06-06
;  PRIOR APPLICATION NUMBER:  60/020,494
;  PRIOR FILING DATE:  1996-06-11
;  PRIOR APPLICATION NUMBER:  60/033,534
;  PRIOR FILING DATE:  1996-12-20
;  NUMBER OF SEQ ID NOS:  25
;  SOFTWARE:  FastSEQ for Windows Version 4.0
; SEQ ID NO 5
;   LENGTH: 573
;   TYPE: DNA
;   ORGANISM: Hepatitis C Virus
US-09-194-949-5

  Query Match             12.5%;  Score 43;  DB 10;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
               |||||||||||||||||||||||||||||||||||||||||||
Db         212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 6
US-09-851-138-65
; Sequence 65, Application US/09851138
; Publication No. US20020183508A1
;  GENERAL INFORMATION:
;       APPLICANT: MAERTENS, GEERT
;                  STUYVER, LIEVEN
;       TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;                           AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;                           AGENTS
;       NUMBER OF SEQUENCES: 207
;       CORRESPONDENCE ADDRESS:
```

```
;             ADDRESSEE: ARNOLD, WHITE & DURKEE
;             STREET: P.O. BOX 4433
;             CITY: HOUSTON
;             STATE: TEXAS
;             COUNTRY: USA
;             ZIP: 77210-4433
;       COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: Microsoft Word 6.0 / ASCII text output
;       CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;       PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;       ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;   INFORMATION FOR SEQ ID NO: 65:
;       SEQUENCE CHARACTERISTICS:
;             LENGTH: 831 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;       MOLECULE TYPE: cDNA
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
;       SEQUENCE DESCRIPTION: SEQ ID NO: 65:
US-09-851-138-65

  Query Match             12.5%;  Score 43;  DB 9;  Length 831;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        227 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 269


RESULT 7
US-09-921-397-39
; Sequence 39, Application US/09921397
; Patent No. US20020151484A1
; GENERAL INFORMATION:
;  APPLICANT: HYBRIGENICS
;  TITLE OF INVENTION: SID nucleic acids and polypeptides selected from a
;  TITLE OF INVENTION:  pathogenic strain of the hepatitis C virus and
;  TITLE OF INVENTION:  applications thereof
;  FILE REFERENCE: B4809A - JAZ
;  CURRENT APPLICATION NUMBER: US/09/921,397
;  CURRENT FILING DATE:  2001-08-02
;  PRIOR APPLICATION NUMBER: EP 00402225.7
;  PRIOR FILING DATE: 2000-08-03
;  NUMBER OF SEQ ID NOS: 156
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 39
;   LENGTH: 152
;   TYPE: DNA
;   ORGANISM: Hepatitis C virus
US-09-921-397-39

  Query Match             9.0%;  Score 31;  DB 9;  Length 152;
  Best Local Similarity   100.0%;  Pred. No. 5.7e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              ||||||||||||||||||||||||||||||
Db        120 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 150


RESULT 8
US-09-921-397-41
; Sequence 41, Application US/09921397
; Patent No. US20020151484A1
; GENERAL INFORMATION:
;  APPLICANT: HYBRIGENICS
;  TITLE OF INVENTION: SID nucleic acids and polypeptides selected from a
;  TITLE OF INVENTION:  pathogenic strain of the hepatitis C virus and
;  TITLE OF INVENTION:  applications thereof
;  FILE REFERENCE: B4809A - JAZ
;  CURRENT APPLICATION NUMBER: US/09/921,397
;  CURRENT FILING DATE:  2001-08-02
;  PRIOR APPLICATION NUMBER: EP 00402225.7
;  PRIOR FILING DATE: 2000-08-03
;  NUMBER OF SEQ ID NOS: 156
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 41
;   LENGTH: 234
;   TYPE: DNA
;   ORGANISM: Hepatitis C virus
US-09-921-397-41

  Query Match             9.0%;  Score 31;  DB 9;  Length 234;
  Best Local Similarity   100.0%;  Pred. No. 5.5e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              ||||||||||||||||||||||||||||||
Db        186 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 216


RESULT 9
US-10-071-867-16
; Sequence 16, Application US/10071867
; Publication No. US20030166267A1
; GENERAL INFORMATION:
;  APPLICANT: CreaGene Inc.
;  TITLE OF INVENTION: METHOD FOR IMPROVING GENETIC STABILITY OF FOREIGN INSERT
;  TITLE OF INVENTION:  NUCLEOTIDE SEQUENCE IN RECOMBINANT SINGLE-STRANDED RNA VIRUS
;  FILE REFERENCE: CreaGene-USA-1
;  CURRENT APPLICATION NUMBER: US/10/071,867
;  CURRENT FILING DATE:  2002-02-08
;  PRIOR APPLICATION NUMBER: KR 2001-6229
;  PRIOR FILING DATE: 2001-02-08
;  NUMBER OF SEQ ID NOS: 95
;  SOFTWARE:  KopatentIn 1.71
; SEQ ID NO 16
;   LENGTH: 300
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: HCV core-100
US-10-071-867-16

  Query Match             9.0%;  Score 31;  DB 15;  Length 300;
  Best Local Similarity   100.0%;  Pred. No. 5.4e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              ||||||||||||||||||||||||||||||
Db        224 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 10
US-09-921-397-114
; Sequence 114, Application US/09921397
; Patent No. US20020151484A1
; GENERAL INFORMATION:
;  APPLICANT: HYBRIGENICS
```

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;  TITLE OF INVENTION: SID nucleic acids and polypeptides selected from a
;  TITLE OF INVENTION:  pathogenic strain of the hepatitis C virus and
;  TITLE OF INVENTION:  applications thereof
;  FILE REFERENCE: B4809A - JAZ
;  CURRENT APPLICATION NUMBER: US/09/921,397
;  CURRENT FILING DATE:  2001-08-02
;  PRIOR APPLICATION NUMBER: EP 00402225.7
;  PRIOR FILING DATE: 2000-08-03
;  NUMBER OF SEQ ID NOS: 156
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 114
;   LENGTH: 310
;   TYPE: DNA
;   ORGANISM: Hepatitis C virus
US-09-921-397-114

  Query Match             9.0%;  Score 31;  DB 9;  Length 310;
  Best Local Similarity   100.0%;  Pred. No. 5.3e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||
Db        264 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 294


RESULT 11
US-09-851-138-1
; Sequence 1, Application US/09851138
; Publication No. US20020183508A1
;   GENERAL INFORMATION:
;        APPLICANT: MAERTENS, GEERT
;                   STUYVER, LIEVEN
;        TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;                            AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;                            AGENTS
;        NUMBER OF SEQUENCES: 207
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: ARNOLD, WHITE & DURKEE
;             STREET: P.O. BOX 4433
;             CITY: HOUSTON
;             STATE: TEXAS
;             COUNTRY: USA
;             ZIP: 77210-4433
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: Microsoft Word 6.0 / ASCII text output
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;   INFORMATION FOR SEQ ID NO: 1:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 327 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: cDNA
;        HYPOTHETICAL: NO
;        ANTI-SENSE: NO
;        SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-851-138-1

  Query Match             9.0%;  Score 31;  DB 9;  Length 327;
  Best Local Similarity   100.0%;  Pred. No. 5.3e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTA 241
              |||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTA 242


RESULT 12
US-09-921-397-115
; Sequence 115, Application US/09921397
; Patent No. US20020151484A1
; GENERAL INFORMATION:
;  APPLICANT: HYBRIGENICS
;  TITLE OF INVENTION: SID nucleic acids and polypeptides selected from a
;  TITLE OF INVENTION:  pathogenic strain of the hepatitis C virus and
;  TITLE OF INVENTION:  applications thereof
;  FILE REFERENCE: B4809A - JAZ
;  CURRENT APPLICATION NUMBER: US/09/921,397
;  CURRENT FILING DATE:  2001-08-02
;  PRIOR APPLICATION NUMBER: EP 00402225.7
;  PRIOR FILING DATE: 2000-08-03
;  NUMBER OF SEQ ID NOS: 156
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 115
;   LENGTH: 339
;   TYPE: DNA
;   ORGANISM: Hepatitis C virus
US-09-921-397-115

  Query Match             9.0%;  Score 31;  DB 9;  Length 339;
  Best Local Similarity   100.0%;  Pred. No. 5.3e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||
Db        224 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 13
US-09-306-780-3
; Sequence 3, Application US/09306780
; Publication No. US20010051336A1
;   GENERAL INFORMATION:
;        APPLICANT: TAKEMURA, FUMINORI
;                   UENO, EIICHI
;                   ITOH, SATORU
;        TITLE OF INVENTION: NUCLEIC ACID-BOUND POLYPEPTIDE, METHOD
;                            OF PRODUCING NUCLEIC ACID-BOUND POLYPEPTIDE AND
;                            IMMUNOASSAY USING THE POLYPEPTIDE.
;        NUMBER OF SEQUENCES: 20
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT,
;                        P.C.
;             STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400
;             CITY: ARLINGTON
;             STATE: VA
;             COUNTRY: U.S.A.
;             ZIP: 22202
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.30
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/306,780
;             FILING DATE: 07-May-1999
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US/08/841,657A
;             FILING DATE: 30-APR-1997
```

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;             APPLICATION NUMBER: JP 8-134444
;             FILING DATE: 01-MAY-1997
;       ATTORNEY/AGENT INFORMATION:
;             NAME: OBLON, NORMAN F.
;             REGISTRATION NUMBER: 24,618
;             REFERENCE/DOCKET NUMBER: 2084-033-0
;       TELECOMMUNICATION INFORMATION:
;             TELEPHONE: (703) 413-3000
;             TELEFAX: (703) 413-2220
;   INFORMATION FOR SEQ ID NO: 3:
;       SEQUENCE CHARACTERISTICS:
;             LENGTH: 360 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;       MOLECULE TYPE: other nucleic acid
;             DESCRIPTION: /desc = "synthetic DNA"
;       FEATURE:
;             NAME/KEY:  CDS
;             LOCATION:  1..360
;       SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-306-780-3

  Query Match             9.0%;  Score 31;  DB 13;  Length 360;
  Best Local Similarity   100.0%;  Pred. No. 5.3e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||
Db        224 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 14
US-09-306-780-5
; Sequence 5, Application US/09306780
; Publication No. US20010051336A1
;   GENERAL INFORMATION:
;       APPLICANT: TAKEMURA, FUMINORI
;                  UENO, EIICHI
;                  ITOH, SATORU
;       TITLE OF INVENTION: NUCLEIC ACID-BOUND POLYPEPTIDE, METHOD
;                           OF PRODUCING NUCLEIC ACID-BOUND POLYPEPTIDE AND
;                           IMMUNOASSAY USING THE POLYPEPTIDE.
;       NUMBER OF SEQUENCES: 20
;       CORRESPONDENCE ADDRESS:
;             ADDRESSEE: OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT,
;                        P.C.
;             STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400
;             CITY: ARLINGTON
;             STATE: VA
;             COUNTRY: U.S.A.
;             ZIP: 22202
;       COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.30
;       CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/306,780
;             FILING DATE: 07-May-1999
;             CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US/08/841,657A
;             FILING DATE: 30-APR-1997
;             APPLICATION NUMBER: JP 8-134444
;             FILING DATE: 01-MAY-1997
;       ATTORNEY/AGENT INFORMATION:
;             NAME: OBLON, NORMAN F.
;             REGISTRATION NUMBER: 24,618
;             REFERENCE/DOCKET NUMBER: 2084-033-0
;       TELECOMMUNICATION INFORMATION:
;             TELEPHONE: (703) 413-3000
;             TELEFAX: (703) 413-2220
;   INFORMATION FOR SEQ ID NO: 5:
;       SEQUENCE CHARACTERISTICS:
;             LENGTH: 450 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;       MOLECULE TYPE: other nucleic acid
;             DESCRIPTION: /desc = "synthetic DNA"
;       FEATURE:
;             NAME/KEY:  CDS
;             LOCATION:  1..450
;       SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-09-306-780-5

  Query Match             9.0%;  Score 31;  DB 13;  Length 450;
  Best Local Similarity   100.0%;  Pred. No. 5.2e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||
Db        224 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 15
US-10-071-867-15
; Sequence 15, Application US/10071867
; Publication No. US20030166267A1
; GENERAL INFORMATION:
;  APPLICANT: CreaGene Inc.
;  TITLE OF INVENTION: METHOD FOR IMPROVING GENETIC STABILITY OF FOREIGN INSERT
;  TITLE OF INVENTION:  NUCLEOTIDE SEQUENCE IN RECOMBINANT SINGLE-STRANDED RNA VIRUS
;  FILE REFERENCE: CreaGene-USA-1
;  CURRENT APPLICATION NUMBER: US/10/071,867
;  CURRENT FILING DATE:  2002-02-08
;  PRIOR APPLICATION NUMBER: KR 2001-6229
;  PRIOR FILING DATE: 2001-02-08
;  NUMBER OF SEQ ID NOS: 95
;  SOFTWARE: KopatentIn 1.71
; SEQ ID NO 15
;   LENGTH: 480
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: HCV core-160
US-10-071-867-15

  Query Match             9.0%;  Score 31;  DB 15;  Length 480;
  Best Local Similarity   100.0%;  Pred. No. 5.1e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||
Db        224 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


Search completed: August 17, 2004, 14:29:34
Job time : 357 secs
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GenCore version 5.1.6

OM nucleic - protein search, using frame_plus_n2p model

Run on: August 10, 2004, 20:37:41 ; Search time 20.5 Seconds
(without alignments)
1737.655 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 639
Sequence: 1 atgagcacacttcctaaacc.....aaatgacccccggcgcagga 345

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 778828

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US09873224_@CGN_1_1_27_@runat_10082004_170934_17629 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued_Patents_AA:*
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6: /cgn2_6/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	608	95.1	115	3	US-08-836-075A-50	Sequence 50, Appl
2	588	92.0	191	2	US-08-290-665A-187	Sequence 187, App
3	588	92.0	191	2	US-08-290-665A-188	Sequence 188, App
4	588	92.0	191	2	US-08-290-665A-190	Sequence 190, App
5	588	92.0	191	5	PCT-US95-10398-187	Sequence 187, App
6	588	92.0	191	5	PCT-US95-10398-188	Sequence 188, App
7	588	92.0	191	5	PCT-US95-10398-190	Sequence 190, App
8	587	91.9	191	2	US-08-290-665A-189	Sequence 189, App
9	587	91.9	191	5	PCT-US95-10398-189	Sequence 189, App
10	574	89.8	191	2	US-08-290-665A-192	Sequence 192, App
11	574	89.8	191	2	US-08-290-665A-193	Sequence 193, App
12	574	89.8	191	2	US-08-290-665A-195	Sequence 195, App
13	574	89.8	191	5	PCT-US95-10398-192	Sequence 192, App
14	574	89.8	191	5	PCT-US95-10398-193	Sequence 193, App
15	574	89.8	191	5	PCT-US95-10398-195	Sequence 195, App
16	571	89.4	319	3	US-08-836-075A-12	Sequence 12, Appl
17	571	89.4	319	4	US-08-635-886C-199	Sequence 199, App
18	571	89.4	319	4	US-08-974-690C-199	Sequence 199, App
19	570	89.2	191	2	US-08-290-665A-196	Sequence 196, App
20	570	89.2	191	5	PCT-US95-10398-196	Sequence 196, App
21	569	89.0	450	4	US-08-635-886C-181	Sequence 181, App
22	569	89.0	450	4	US-08-974-690C-181	Sequence 181, App
23	569	89.0	2894	2	US-08-466-975A-23	Sequence 23, Appl
24	569	89.0	2894	2	US-08-391-671A-23	Sequence 23, Appl
25	569	89.0	2894	3	US-08-467-902A-23	Sequence 23, Appl
26	569	89.0	2894	3	US-09-275-265-23	Sequence 23, Appl
27	569	89.0	2894	4	US-09-941-611-23	Sequence 23, Appl
28	568	88.9	182	4	US-10-104-966-2	Sequence 2, Appli
29	568	88.9	191	2	US-08-290-665A-156	Sequence 156, App
30	568	88.9	191	2	US-08-290-665A-157	Sequence 157, App
31	568	88.9	191	2	US-08-290-665A-158	Sequence 158, App
32	568	88.9	191	2	US-08-290-665A-159	Sequence 159, App
33	568	88.9	191	2	US-08-290-665A-160	Sequence 160, App
34	568	88.9	191	2	US-08-290-665A-191	Sequence 191, App
35	568	88.9	191	2	US-08-290-665A-197	Sequence 197, App
36	568	88.9	191	3	US-08-380-160-3	Sequence 3, Appli
37	568	88.9	191	5	PCT-US95-10398-156	Sequence 156, App
38	568	88.9	191	5	PCT-US95-10398-157	Sequence 157, App
39	568	88.9	191	5	PCT-US95-10398-158	Sequence 158, App
40	568	88.9	191	5	PCT-US95-10398-159	Sequence 159, App
41	568	88.9	191	5	PCT-US95-10398-160	Sequence 160, App
42	568	88.9	191	5	PCT-US95-10398-191	Sequence 191, App
43	568	88.9	191	5	PCT-US95-10398-197	Sequence 197, App
44	568	88.9	319	4	US-08-635-886C-217	Sequence 217, App
45	568	88.9	319	4	US-08-974-690C-217	Sequence 217, App

ALIGNMENTS

RESULT 1
US-08-836-075A-50
; Sequence 50, Application US/08836075A
; Patent No. 6180768
; GENERAL INFORMATION:
; APPLICANT: MAERTENS, GEERT
; APPLICANT: STUYVER, LIEVEN
; TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
; TITLE OF INVENTION: AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
; TITLE OF INVENTION: AGENTS
; NUMBER OF SEQUENCES: 207
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ARNOLD, WHITE & DURKEE
; STREET: P.O. BOX 4433
; CITY: HOUSTON
; STATE: TEXAS
; COUNTRY: USA
; ZIP: 77210-4433
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Microsoft Word 6.0 / ASCII text output
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/836,075A
; FILING DATE: 21 Apr 1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/EP95/04155
; FILING DATE: 23 Oct 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: EP 94870166.9
; FILING DATE: 21 Oct 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: EP 95870076.7
; FILING DATE: 28 Jun 1995
; ATTORNEY/AGENT INFORMATION:

```
;      NAME:  KAMMERER, PATRICIA A.
;      REGISTRATION NUMBER:  29,775
;      REFERENCE/DOCKET NUMBER:  INNS:004
;   INFORMATION FOR SEQ ID NO:  50:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  115 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  peptide
US-08-836-075A-50

Alignment Scores:
Pred. No.:              3.66e-50        Length:         115
Score:                  608.00          Matches:        114
Percent Similarity:     99.13%          Conservative:   0
Best Local Similarity:  99.13%          Mismatches:     1
Query Match:            95.15%          Indels:         1
DB:                     3               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-836-075A-50 (1-115)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||||| |||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrAsn***ArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         41 GlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGlnProArgSer 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 2
US-08-290-665A-187
; Sequence 187, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;     APPLICANT:  BUKH, J., MILLER, R.H. AND
;     APPLICANT:  PURCELL, R.H.
;     TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;     TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;     TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;     TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;     TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;     NUMBER OF SEQUENCES:  263
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  MORGAN & FINNEGAN
;       STREET:  345 PARK AVENUE
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
;       ZIP:  10154
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  FLOPPY DISK
;       COMPUTER:  IBM PC COMPATIBLE
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  WORDPERFECT 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/290,665A
;       FILING DATE:  15-AUG-1994
;       CLASSIFICATION:  435
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  187:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  191 amino acids
;       TYPE:  amino acid
;       STRANDEDNESS:  unknown
;       TOPOLOGY:  unknown
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  HK10
US-08-290-665A-187

Alignment Scores:
Pred. No.:              3.19e-48        Length:         191
Score:                  588.00          Matches:        108
Percent Similarity:     96.52%          Conservative:   3
Best Local Similarity:  93.91%          Mismatches:     4
Query Match:            92.02%          Indels:         1
DB:                     2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-187 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||| |||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 3
US-08-290-665A-188
; Sequence 188, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;     APPLICANT:  BUKH, J., MILLER, R.H. AND
;     APPLICANT:  PURCELL, R.H.
;     TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;     TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;     TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;     TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;     TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;     NUMBER OF SEQUENCES:  263
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  MORGAN & FINNEGAN
;       STREET:  345 PARK AVENUE
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
```

```
;       ZIP:  10154
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  FLOPPY DISK
;       COMPUTER:  IBM PC COMPATIBLE
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  WORDPERFECT 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/290,665A
;       FILING DATE:  15-AUG-1994
;       CLASSIFICATION:  435
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  188:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  191 amino acids
;       TYPE:  amino acid
;       STRANDEDNESS:  unknown
;       TOPOLOGY:  unknown
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  S52
US-08-290-665A-188

Alignment Scores:
Pred. No.:                3.19e-48        Length:         191
Score:                    588.00          Matches:        108
Percent Similarity:       96.52%          Conservative:   3
Best Local Similarity:    93.91%          Mismatches:     4
Query Match:              92.02%          Indels:         1
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-188 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||      |||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||    |||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 4
US-08-290-665A-190
; Sequence 190, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;     APPLICANT:  BUKH, J., MILLER, R.H. AND
;     APPLICANT:  PURCELL, R.H.
;     TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;     TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;     TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;     TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;     TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;     NUMBER OF SEQUENCES:  263
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  MORGAN & FINNEGAN
;       STREET:  345 PARK AVENUE
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
;       ZIP:  10154
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  FLOPPY DISK
;       COMPUTER:  IBM PC COMPATIBLE
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  WORDPERFECT 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/290,665A
;       FILING DATE:  15-AUG-1994
;       CLASSIFICATION:  435
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  190:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  191 amino acids
;       TYPE:  amino acid
;       STRANDEDNESS:  unknown
;       TOPOLOGY:  unknown
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  DK12
US-08-290-665A-190

Alignment Scores:
Pred. No.:                3.19e-48        Length:         191
Score:                    588.00          Matches:        108
Percent Similarity:       96.52%          Conservative:   3
Best Local Similarity:    93.91%          Mismatches:     4
Query Match:              92.02%          Indels:         1
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-190 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||      |||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||    |||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 5
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PCT-US95-10398-187
; Sequence 187, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  187:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  HK10
PCT-US95-10398-187

Alignment Scores:
Pred. No.:              3.19e-48        Length:         191
Score:                  588.00          Matches:        108
Percent Similarity:     96.52%          Conservative:   3
Best Local Similarity:  93.91%          Mismatches:     4
Query Match:            92.02%          Indels:         1
DB:                     5               Gaps:           0

US-09-873-224A-147 (1-345) x PCT-US95-10398-187 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||| |||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 6
PCT-US95-10398-188
; Sequence 188, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  188:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S52
PCT-US95-10398-188

Alignment Scores:
Pred. No.:              3.19e-48        Length:         191
Score:                  588.00          Matches:        108
Percent Similarity:     96.52%          Conservative:   3
Best Local Similarity:  93.91%          Mismatches:     4
Query Match:            92.02%          Indels:         1
DB:                     5               Gaps:           0
```

```
US-09-873-224A-147 (1-345) x PCT-US95-10398-188 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||      ||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 7
PCT-US95-10398-190
; Sequence 190, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  190:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  DK12
PCT-US95-10398-190

Alignment Scores:
Pred. No.:                3.19e-48      Length:          191
Score:                    588.00        Matches:         108
Percent Similarity:       96.52%        Conservative:    3
Best Local Similarity:    93.91%        Mismatches:      4
Query Match:              92.02%        Indels:          1
DB:                       5             Gaps:            0

US-09-873-224A-147 (1-345) x PCT-US95-10398-190 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||      ||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 8
US-08-290-665A-189
; Sequence 189, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
```

```
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  189:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S2
US-08-290-665A-189

Alignment Scores:
Pred. No.:              3.97e-48        Length:         191
Score:                  587.00          Matches:        107
Percent Similarity:     96.52%          Conservative:   4
Best Local Similarity:  93.04%          Mismatches:     4
Query Match:            91.86%          Indels:         1
DB:                     2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-189 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||      |||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||:::|||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspIleLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||:::|||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 9
PCT-US95-10398-189
; Sequence 189, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  189:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S2
PCT-US95-10398-189

Alignment Scores:
Pred. No.:              3.97e-48        Length:         191
Score:                  587.00          Matches:        107
Percent Similarity:     96.52%          Conservative:   4
Best Local Similarity:  93.04%          Mismatches:     4
Query Match:            91.86%          Indels:         1
DB:                     5               Gaps:           0

US-09-873-224A-147 (1-345) x PCT-US95-10398-189 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||      |||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||:::|||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspIleLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||:::|||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 10
US-08-290-665A-192
; Sequence 192, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
```

```
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  192:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z8
US-08-290-665A-192

Alignment Scores:
Pred. No.:              6.88e-47        Length:         191
Score:                  574.00          Matches:        106
Percent Similarity:     95.65%          Conservative:   4
Best Local Similarity:  92.17%          Mismatches:     5
Query Match:            89.83%          Indels:         1
DB:                     2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-192 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||  |||||||||||||||||||||||||||||||||||||   ||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProMet 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115
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```
RESULT 11
US-08-290-665A-193
; Sequence 193, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  193:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z1
US-08-290-665A-193

Alignment Scores:
Pred. No.:              6.88e-47        Length:         191
Score:                  574.00          Matches:        106
Percent Similarity:     95.65%          Conservative:   4
Best Local Similarity:  92.17%          Mismatches:     5
Query Match:            89.83%          Indels:         1
DB:                     2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-193 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||  |||||||||||||||||||||||||||||||||||||   ||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProMet 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaAlaArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80
```

```
Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 12
US-08-290-665A-195
; Sequence 195, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  195:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z6
US-08-290-665A-195

Alignment Scores:
Pred. No.:              6.88e-47        Length:         191
Score:                  574.00          Matches:        106
Percent Similarity:     95.65%          Conservative:   4
Best Local Similarity:  92.17%          Mismatches:     5
Query Match:            89.83%          Indels:         1
DB:                     2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-195 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||  ||||||||||||||||||||||||||||||||||||  ||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProMet 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||

Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||  ||||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||:::||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 13
PCT-US95-10398-192
; Sequence 192, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  192:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z8
PCT-US95-10398-192

Alignment Scores:
Pred. No.:              6.88e-47        Length:         191
```

```
Score:                  574.00          Matches:        106
Percent Similarity:     95.65%          Conservative:   4
Best Local Similarity:  92.17%          Mismatches:     5
Query Match:            89.83%          Indels:         1
DB:                     5               Gaps:           0

US-09-873-224A-147 (1-345) x PCT-US95-10398-192 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   |||||||||||||||||||||||||||||||||||   ||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProMet 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||||||||||||||||||||||||||||||||:::|||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 14
PCT-US95-10398-193
; Sequence 193, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  193:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z1
PCT-US95-10398-193

Alignment Scores:
Pred. No.:              6.88e-47        Length:         191
Score:                  574.00          Matches:        106
Percent Similarity:     95.65%          Conservative:   4
Best Local Similarity:  92.17%          Mismatches:     5
Query Match:            89.83%          Indels:         1
DB:                     5               Gaps:           0

US-09-873-224A-147 (1-345) x PCT-US95-10398-193 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   |||||||||||||||||||||||||||||||||||   ||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProMet 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||||||||||||||||||||||||||||||||:::|||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaAlaArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 15
PCT-US95-10398-195
; Sequence 195, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
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;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/086,428
;       FILING DATE:  29 JUNE 1993
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/290/665
;       FILING DATE:  15 AUGUST 1994
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  195:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  191 amino acids
;       TYPE:  amino acid
;       STRANDEDNESS:  unknown
;       TOPOLOGY:  unknown
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  Z6
PCT-US95-10398-195

Alignment Scores:
Pred. No.:              6.88e-47        Length:         191
Score:                  574.00          Matches:        106
Percent Similarity:     95.65%          Conservative:   4
Best Local Similarity:  92.17%          Mismatches:     5
Query Match:            89.83%          Indels:         1
DB:                     5               Gaps:           0

US-09-873-224A-147 (1-345) x PCT-US95-10398-195 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||  ||||||||||||||||||||||||||||||||||||   ||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProMet 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115


Search completed: August 10, 2004, 20:43:41
Job time : 22.5 secs
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GenCore version 5.1.6

OM nucleic - protein search, using frame_plus_n2p model

Run on: August 10, 2004, 20:41:57 ; Search time 43.5 Seconds
(without alignments)
4975.660 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 639
Sequence: 1 atgagcacacttcctaaacc.....aaatgacccccggcgcagga 345

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5 .
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 1291235 seqs, 313682936 residues

Total number of hits satisfying chosen parameters: 2582470

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
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-Q=/cgn2_1/USPTO_spool_p/US09873224/runat_10082004_170936_17665/app_query.fasta_1.519
-DB=Published_Applications_AA -QFMT=fastan -SUFFIX=n2p.rapb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US09873224_@CGN_1_1_13_@runat_10082004_170936_17665
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Published_Applications_AA:*
1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
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4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
6: /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep:*
7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
9: /cgn2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep:*
10: /cgn2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*
11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*
12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
13: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep:*
14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*
15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
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18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	617	96.6	115	12	US-09-873-224-148	Sequence 148, App
2	608	95.1	115	9	US-09-851-138-50	Sequence 50, Appl
3	608	95.1	115	10	US-09-899-046-148	Sequence 148, App
4	608	95.1	115	10	US-09-878-281-148	Sequence 148, App
5	581	90.9	189	12	US-10-450-649-9	Sequence 9, Appli
6	575	90.0	235	15	US-10-365-620-58	Sequence 58, Appl
7	575	90.0	249	15	US-10-365-620-54	Sequence 54, Appl
8	575	90.0	459	15	US-10-365-620-60	Sequence 60, Appl
9	575	90.0	473	15	US-10-365-620-56	Sequence 56, Appl
10	571	89.4	130	14	US-10-268-569-19	Sequence 19, Appl
11	571	89.4	319	9	US-09-851-138-12	Sequence 12, Appl
12	571	89.4	319	12	US-10-651-165-199	Sequence 199, App
13	569	89.0	450	12	US-10-651-165-181	Sequence 181, App
14	569	89.0	2894	9	US-09-941-611-23	Sequence 23, Appl
15	569	89.0	2894	14	US-10-044-995-23	Sequence 23, Appl
16	568	88.9	151	14	US-10-292-129-14	Sequence 14, Appl
17	568	88.9	182	9	US-09-929-955-2	Sequence 2, Appli
18	568	88.9	182	13	US-10-104-966-2	Sequence 2, Appli
19	568	88.9	182	16	US-10-719-619-2	Sequence 2, Appli
20	568	88.9	319	12	US-10-651-165-217	Sequence 217, App
21	568	88.9	450	12	US-10-651-165-179	Sequence 179, App
22	568	88.9	450	12	US-10-651-165-180	Sequence 180, App
23	568	88.9	3011	9	US-09-742-659-4	Sequence 4, Appli
24	568	88.9	3011	9	US-09-952-572-9	Sequence 9, Appli
25	568	88.9	3011	9	US-09-929-955-1	Sequence 1, Appli
26	568	88.9	3011	9	US-09-747-419-20	Sequence 20, Appl
27	568	88.9	3011	10	US-09-891-894-3	Sequence 3, Appli
28	568	88.9	3011	12	US-10-189-359-14	Sequence 14, Appl
29	568	88.9	3011	12	US-10-296-734-406	Sequence 406, App
30	568	88.9	3011	13	US-10-104-966-1	Sequence 1, Appli
31	568	88.9	3011	14	US-10-259-275-20	Sequence 20, Appl
32	568	88.9	3011	14	US-10-184-150-3	Sequence 3, Appli
33	568	88.9	3011	15	US-10-328-997-3	Sequence 3, Appli
34	568	88.9	3011	16	US-10-719-619-1	Sequence 1, Appli
35	568	88.9	3012	9	US-09-238-076-2	Sequence 2, Appli
36	568	88.9	3012	10	US-09-995-937-2	Sequence 2, Appli
37	568	88.9	3012	10	US-09-917-563-2	Sequence 2, Appli
38	567	88.7	117	9	US-09-851-138-28	Sequence 28, Appl
39	567	88.7	117	12	US-10-651-165-225	Sequence 225, App
40	567	88.7	424	14	US-10-173-480-28	Sequence 28, Appl
41	566	88.6	166	10	US-09-899-046-194	Sequence 194, App
42	566	88.6	166	10	US-09-878-281-194	Sequence 194, App
43	566	88.6	166	12	US-09-873-224-194	Sequence 194, App
44	565	88.4	161	12	US-09-306-780-8	Sequence 8, Appli
45	565	88.4	281	12	US-09-306-780-12	Sequence 12, Appl

ALIGNMENTS

RESULT 1
US-09-873-224-148
; Sequence 148, Application US/09873224
; Publication No. US20030064360A1
; GENERAL INFORMATION:
; APPLICANT: <Unknown>
; TITLE OF INVENTION: New sequences of hepatitis C virus
; genotypes for diagnosis, prophylaxis and therapy.
; NUMBER OF SEQUENCES: 270
; CORRESPONDENCE ADDRESS:
; STREET: Industriepark Zwijnaarde 7, box 4
; CITY: Ghent
; COUNTRY: Belgium
; ZIP: B-9052
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/873,224
; FILING DATE: 05-Jun-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:

```
;             APPLICATION NUMBER: 08/362,455
;             FILING DATE: <Unknown>
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Innogenetics sa.
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 00 32 9 241 07 11
;             TELEFAX: 00 32 9 241 07 99
;   INFORMATION FOR SEQ ID NO: 148:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 115 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;        MOLECULE TYPE: protein
;        SEQUENCE DESCRIPTION: SEQ ID NO: 148:
US-09-873-224-148

Alignment Scores:
Pred. No.:              5.19e-47      Length:         115
Score:                  617.00        Matches:        115
Percent Similarity:     100.00%       Conservative:   0
Best Local Similarity:  100.00%       Mismatches:     0
Query Match:            96.56%        Indels:         0
DB:                     12            Gaps:           0

US-09-873-224A-147 (1-345) x US-09-873-224-148 (1-115)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrAsnProGlyHisArg 20

Qy         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 ThrLeuSerSerGlnAlaAlaValArgSerLeuValGluPheThrCysTyrHisAlaGly 40

Qy        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         41 AlaProSerTrpValCysValGlnCysAlaArgLeuProSerGlyArgAsnLeuAlaVal 60

Qy        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 GlyAlaAsnProSerProGlyArgAlaGluProArgAlaGlyProGlyLeuSerProGly 80

Qy        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 ThrLeuGlyProTyrMetGlyMetArgAlaAlaGlyGlyGlnGlyGlySerCysProArg 100

Qy        301 GCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 345
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 AlaAlaLeuAlaArgArgGlyAlaGlnMetThrProGlyAlaGly 115

RESULT 2
US-09-851-138-50
; Sequence 50, Application US/09851138
; Publication No. US20020183508A1
;   GENERAL INFORMATION:
;        APPLICANT: MAERTENS, GEERT
;                   STUYVER, LIEVEN
;        TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;                            AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;                            AGENTS
;        NUMBER OF SEQUENCES: 207
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: ARNOLD, WHITE & DURKEE
;             STREET: P.O. BOX 4433
;             CITY: HOUSTON
;             STATE: TEXAS
;             COUNTRY: USA
;             ZIP: 77210-4433
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: Microsoft Word 6.0 / ASCII text output
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;   INFORMATION FOR SEQ ID NO: 50:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 115 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;        MOLECULE TYPE: peptide
;        SEQUENCE DESCRIPTION: SEQ ID NO: 50:
US-09-851-138-50

Alignment Scores:
Pred. No.:              3.34e-46      Length:         115
Score:                  608.00        Matches:        114
Percent Similarity:     99.13%        Conservative:   0
Best Local Similarity:  99.13%        Mismatches:     1
Query Match:            95.15%        Indels:         1
DB:                     9             Gaps:           0

US-09-873-224A-147 (1-345) x US-09-851-138-50 (1-115)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||||| |||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrAsn***ArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         41 GlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGlnProArgSer 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 3
US-09-899-046-148
; Sequence 148, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
```

```
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  148:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  115 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-899-046-148

Alignment Scores:
Pred. No.:              3.34e-46       Length:         115
Score:                  608.00         Matches:        114
Percent Similarity:     99.13%         Conservative:   0
Best Local Similarity:  99.13%         Mismatches:     1
Query Match:            95.15%         Indels:         1
DB:                     10             Gaps:           0

US-09-873-224A-147 (1-345) x US-09-899-046-148 (1-115)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrAsn***ArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         41 GlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGlnProArgSer 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 4
US-09-878-281-148
; Sequence 148, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  148:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  115 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-878-281-148

Alignment Scores:
Pred. No.:              3.34e-46       Length:         115
Score:                  608.00         Matches:        114
Percent Similarity:     99.13%         Conservative:   0
Best Local Similarity:  99.13%         Mismatches:     1
Query Match:            95.15%         Indels:         1
DB:                     10             Gaps:           0

US-09-873-224A-147 (1-345) x US-09-878-281-148 (1-115)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrAsn***ArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         41 GlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGlnProArgSer 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 5
US-10-450-649-9
; Sequence 9, Application US/10450649
; Publication No. US20040052818A1
; GENERAL INFORMATION:
;  APPLICANT: Heinz, Franz X.
;  APPLICANT:  Mandl, Christian
;  TITLE OF INVENTION: ATTENUATED LIVE VACCINE
;  FILE REFERENCE: U 014666-0
;  CURRENT APPLICATION NUMBER: US/10/450,649
;  CURRENT FILING DATE:  2003-06-16
;  PRIOR APPLICATION NUMBER: PCT/AT02/00046
;  PRIOR FILING DATE: 2002-02-11
;  PRIOR APPLICATION NUMBER: A 272/2001 AT
;  PRIOR FILING DATE: 2001-02-21
;  NUMBER OF SEQ ID NOS: 9
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
;   LENGTH: 189
;   TYPE: PRT
;   ORGANISM: Hepatitis C Virus 3
US-10-450-649-9

Alignment Scores:
Pred. No.:              9.21e-44       Length:         189
Score:                  581.00         Matches:        106
Percent Similarity:     96.49%         Conservative:   4
Best Local Similarity:  92.98%         Mismatches:     4
Query Match:            90.92%         Indels:         1
DB:                     12             Gaps:           0

US-09-873-224A-147 (1-345) x US-10-450-649-9 (1-189)

Qy          4 AGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAGGAC 62
              |||||||||||||||||||||||||||||||||||||||||||  ||||||||||||
Db          1 SerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGlnAsp 20

Qy         63 GTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGGGC 122
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                ||||||||||||||||||||||||:::|||||||||||||||||||||||||||||||||
Db          21 ValLysPheProGlyGlyGlyGlnLeuValGlyGlyValTyrValLeuProArgArgGly 40

Qy         123 CCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTAGG 182
                |||:::|||||||||||||||   |||||||||||||||||||||||||||||   |||
Db          41 ProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGlyArg 60

Qy         183 CGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGTAC 242
                |||||||||||||||:::|||||||:::|||||||||||||||||||||||||||||||
Db          61 ArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGlyTyr 80

Qy         243 CCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGCGC 302
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          81 ProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerProArg 100

Qy         303 GGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
                |||||||||||||||||||||||||||||||||||||||||
Db         101 GlySerArgProSerTrpGlyProAsnAspProArgArgArg 114

RESULT 6
US-10-365-620-58
; Sequence 58, Application US/10365620
; Publication No. US20040001853A1
; GENERAL INFORMATION:
;  APPLICANT: George, Rajan
;  APPLICANT:  Tyrrell, Lorne
;  APPLICANT:  No. US20040001853A1jaim, Antoine
;  TITLE OF INVENTION: Chimeric Antigens for Eliciting An Immune Response
;  FILE REFERENCE: 656.0016
;  CURRENT APPLICATION NUMBER: US/10/365,620
;  CURRENT FILING DATE:  2003-02-13
;  PRIOR APPLICATION NUMBER: US60/423,578
;  PRIOR FILING DATE: 2003-11-05
;  PRIOR APPLICATION NUMBER: 60/390,564
;  PRIOR FILING DATE: 2002-06-20
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 58
;   LENGTH: 235
;   TYPE: PRT
;   ORGANISM: HCV Core
US-10-365-620-58

Alignment Scores:
Pred. No.:              3.24e-43        Length:         235
Score:                  575.00          Matches:        105
Percent Similarity:     94.78%          Conservative:   4
Best Local Similarity:  91.30%          Mismatches:     6
Query Match:            89.98%          Indels:         1
DB:                     15              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-365-620-58 (1-235)

Qy           1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
                |||||||||   ||||||||||||||||||||||||||||||||||||   |||||||||
Db          31 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 50

Qy          60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
                ||||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db          51 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 70

Qy         120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
                ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db          71 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 90

Qy         180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
                ||||||||||||||||||:::|||||||||   |||||||||:::|||||||||||||||
Db          91 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgThrTrpAlaGlnProGly 110

Qy         240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         111 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 130

Qy         300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
                |||||||||||||||||||||||||   |||||||||||||||
Db         131 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 145

RESULT 7
US-10-365-620-54
; Sequence 54, Application US/10365620
; Publication No. US20040001853A1
; GENERAL INFORMATION:
;  APPLICANT: George, Rajan
;  APPLICANT:  Tyrrell, Lorne
;  APPLICANT:  No. US20040001853A1jaim, Antoine
;  TITLE OF INVENTION: Chimeric Antigens for Eliciting An Immune Response
;  FILE REFERENCE: 656.0016
;  CURRENT APPLICATION NUMBER: US/10/365,620
;  CURRENT FILING DATE:  2003-02-13
;  PRIOR APPLICATION NUMBER: US60/423,578
;  PRIOR FILING DATE: 2003-11-05
;  PRIOR APPLICATION NUMBER: 60/390,564
;  PRIOR FILING DATE: 2002-06-20
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 54
;   LENGTH: 249
;   TYPE: PRT
;   ORGANISM: ORF of HCV Core Protein
US-10-365-620-54

Alignment Scores:
Pred. No.:              3.25e-43        Length:         249
Score:                  575.00          Matches:        105
Percent Similarity:     94.78%          Conservative:   4
Best Local Similarity:  91.30%          Mismatches:     6
Query Match:            89.98%          Indels:         1
DB:                     15              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-365-620-54 (1-249)

Qy           1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
                |||||||||   ||||||||||||||||||||||||||||||||||||   |||||||||
Db          31 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 50

Qy          60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
                ||||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db          51 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 70

Qy         120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
                ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db          71 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 90

Qy         180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
                ||||||||||||||||||:::|||||||||   |||||||||:::|||||||||||||||
Db          91 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgThrTrpAlaGlnProGly 110

Qy         240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         111 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 130

Qy         300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
                |||||||||||||||||||||||||   |||||||||||||||
Db         131 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 145

RESULT 8
US-10-365-620-60
; Sequence 60, Application US/10365620
; Publication No. US20040001853A1
; GENERAL INFORMATION:
;  APPLICANT: George, Rajan
;  APPLICANT:  Tyrrell, Lorne
;  APPLICANT:  No. US20040001853A1jaim, Antoine
;  TITLE OF INVENTION: Chimeric Antigens for Eliciting An Immune Response
;  FILE REFERENCE: 656.0016
;  CURRENT APPLICATION NUMBER: US/10/365,620
```

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;  CURRENT FILING DATE:  2003-02-13
;  PRIOR APPLICATION NUMBER: US60/423,578
;  PRIOR FILING DATE: 2003-11-05
;  PRIOR APPLICATION NUMBER: 60/390,564
;  PRIOR FILING DATE: 2002-06-20
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 60
;   LENGTH: 459
;   TYPE: PRT
;   ORGANISM: HCV Core-TBD protein
US-10-365-620-60

Alignment Scores:
Pred. No.:              3.39e-43        Length:         459
Score:                  575.00          Matches:        105
Percent Similarity:     94.78%          Conservative:   4
Best Local Similarity:  91.30%          Mismatches:     6
Query Match:            89.98%          Indels:         1
DB:                     15              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-365-620-60 (1-459)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   ||||||||||||||||||||||||||||||||||||   |||||||||
Db         31 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 50

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         51 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 70

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db         71 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 90

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||   |||||||||:::||||||||||||||
Db         91 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgThrTrpAlaGlnProGly 110

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        111 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 130

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||   ||||||||||||||
Db        131 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 145

RESULT 9
US-10-365-620-56
; Sequence 56, Application US/10365620
; Publication No. US20040001853A1
; GENERAL INFORMATION:
;  APPLICANT: George, Rajan
;  APPLICANT:  Tyrrell, Lorne
;  APPLICANT:  No. US20040001853A1jaim, Antoine
;  TITLE OF INVENTION: Chimeric Antigens for Eliciting An Immune Response
;  FILE REFERENCE: 656.0016
;  CURRENT APPLICATION NUMBER: US/10/365,620
;  CURRENT FILING DATE:  2003-02-13
;  PRIOR APPLICATION NUMBER: US60/423,578
;  PRIOR FILING DATE: 2003-11-05
;  PRIOR APPLICATION NUMBER: 60/390,564
;  PRIOR FILING DATE: 2002-06-20
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 56
;   LENGTH: 473
;   TYPE: PRT
;   ORGANISM: ORF of HCV Core-TBD protein
US-10-365-620-56

Alignment Scores:
Pred. No.:              3.39e-43        Length:         473
Score:                  575.00          Matches:        105
Percent Similarity:     94.78%          Conservative:   4
Best Local Similarity:  91.30%          Mismatches:     6
Query Match:            89.98%          Indels:         1
DB:                     15              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-365-620-56 (1-473)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   ||||||||||||||||||||||||||||||||||||   |||||||||
Db         31 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 50

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         51 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 70

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db         71 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 90

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||   |||||||||:::||||||||||||||
Db         91 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgThrTrpAlaGlnProGly 110

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        111 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 130

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||   ||||||||||||||
Db        131 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 145

RESULT 10
US-10-268-569-19
; Sequence 19, Application US/10268569
; Publication No. US20030152965A1
; GENERAL INFORMATION:
;  APPLICANT: Ortho-Clinical Diagnostics, Inc.
;  TITLE OF INVENTION: HCV Core Protein Sequences
;  FILE REFERENCE: CDS-0288
;  CURRENT APPLICATION NUMBER: US/10/268,569
;  CURRENT FILING DATE:  2002-10-10
;  PRIOR APPLICATION NUMBER: 60/347,303
;  PRIOR FILING DATE: 2001-11-11
;  NUMBER OF SEQ ID NOS: 19
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 19
;   LENGTH: 130
;   TYPE: PRT
;   ORGANISM: Hepatitis C virus
US-10-268-569-19

Alignment Scores:
Pred. No.:              7.11e-43        Length:         130
Score:                  571.00          Matches:        106
Percent Similarity:     94.78%          Conservative:   3
Best Local Similarity:  92.17%          Mismatches:     6
Query Match:            89.36%          Indels:         1
DB:                     14              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-268-569-19 (1-130)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   ||||||||||||||||||||||||||||||||||||   |||||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60
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Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||   ||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||   ||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 115
```

RESULT 11
US-09-851-138-12
; Sequence 12, Application US/09851138
; Publication No. US20020183508A1
; GENERAL INFORMATION:
; APPLICANT: MAERTENS, GEERT
; STUYVER, LIEVEN
; TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
; AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
; AGENTS
; NUMBER OF SEQUENCES: 207
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ARNOLD, WHITE & DURKEE
; STREET: P.O. BOX 4433
; CITY: HOUSTON
; STATE: TEXAS
; COUNTRY: USA
; ZIP: 77210-4433
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Microsoft Word 6.0 / ASCII text output
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/851,138
; FILING DATE: 09-May-2001
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/836,075
; FILING DATE: <Unknown>
; APPLICATION NUMBER: EP 94870166.9
; FILING DATE: 21 Oct 1994
; APPLICATION NUMBER: EP 95870076.7
; FILING DATE: 28 Jun 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: KAMMERER, PATRICIA A.
; REGISTRATION NUMBER: 29,775
; REFERENCE/DOCKET NUMBER: INNS:004
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 319 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-09-851-138-12

Alignment Scores:

Pred. No.:	7.56e-43	Length:	319
Score:	571.00	Matches:	106
Percent Similarity:	94.78%	Conservative:	3
Best Local Similarity:	92.17%	Mismatches:	6
Query Match:	89.36%	Indels:	1
DB:	9	Gaps:	0

US-09-873-224A-147 (1-345) x US-09-851-138-12 (1-319)

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Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   ||||||||||||||||||||||||||||||||||   |||||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||   ||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||   ||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrAlaAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115
```

RESULT 12
US-10-651-165-199
; Sequence 199, Application US/10651165
; Publication No. US20040047877A1
; GENERAL INFORMATION:
; APPLICANT: LEROUX-ROELS, Geert
; APPLICANT: DELEYS, Robert
; APPLICANT: MAERTENS, Geert
; TITLE OF INVENTION: IMMUNODOMINANT HUMAN T CELL EPITOPES OF HEPATITIS C
; TITLE OF INVENTION: VIRUS
; FILE REFERENCE: 2551-94
; CURRENT APPLICATION NUMBER: US/10/651,165
; CURRENT FILING DATE: 2003-09-02
; PRIOR APPLICATION NUMBER: US/08/974,690C
; PRIOR FILING DATE: 1997-11-19
; PRIOR APPLICATION NUMBER: PCT/EP94/03555
; PRIOR FILING DATE: 1994-10-28
; PRIOR APPLICATION NUMBER: EP 93402718.6
; PRIOR FILING DATE: 1993-11-04
; NUMBER OF SEQ ID NOS: 286
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 199
; LENGTH: 319
; TYPE: PRT
; ORGANISM: hepatitis C virus
; FEATURE:
; NAME/KEY: MISC_FEATURE
; LOCATION: (152)..(152)
; OTHER INFORMATION: Xaa is any amino acid
; FEATURE:
; NAME/KEY: MISC_FEATURE
; LOCATION: (159)..(159)
; OTHER INFORMATION: Xaa is any amino acid
; FEATURE:
; NAME/KEY: MISC_FEATURE
; LOCATION: (163)..(163)
; OTHER INFORMATION: Xaa is any amino acid
; FEATURE:
; NAME/KEY: MISC_FEATURE
; LOCATION: (164)..(164)
; OTHER INFORMATION: Xaa is any amino acid
; FEATURE:
; NAME/KEY: MISC_FEATURE
; LOCATION: (165)..(165)
; OTHER INFORMATION: Xaa is any amino acid
; FEATURE:
; NAME/KEY: MISC_FEATURE
; LOCATION: (166)..(166)
; OTHER INFORMATION: Xaa is any amino acid
; FEATURE:
; NAME/KEY: MISC_FEATURE
; LOCATION: (167)..(167)
; OTHER INFORMATION: Xaa is any amino acid

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;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (170)..(170)
;   OTHER INFORMATION: Xaa is any amino acid
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (174)..(174)
;   OTHER INFORMATION: Xaa is any amino acid
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (175)..(175)
;   OTHER INFORMATION: Xaa is any amino acid
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (180)..(180)
;   OTHER INFORMATION: Xaa is any amino acid
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (226)..(226)
;   OTHER INFORMATION: Xaa is any amino acid
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (317)..(317)
;   OTHER INFORMATION: Xaa is any amino acid
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (318)..(318)
;   OTHER INFORMATION: Xaa is any amino acid
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (319)..(319)
;   OTHER INFORMATION: Xaa is any amino acid
US-10-651-165-199

Alignment Scores:
Pred. No.:              7.56e-43        Length:         319
Score:                  571.00          Matches:        106
Percent Similarity:     94.78%          Conservative:   3
Best Local Similarity:  92.17%          Mismatches:     6
Query Match:            89.36%          Indels:         1
DB:                     12              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-651-165-199 (1-319)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||  ||||||||||||||||||||||||||||||||||||  |||||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||:::||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||  ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||  ||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||  ||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrAlaAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 13
US-10-651-165-181
; Sequence 181, Application US/10651165
; Publication No. US20040047877A1
; GENERAL INFORMATION:
;  APPLICANT: LEROUX-ROELS, Geert
;  APPLICANT:  DELEYS, Robert
;  APPLICANT:  MAERTENS, Geert
;  TITLE OF INVENTION: IMMUNODOMINANT HUMAN T CELL EPITOPES OF HEPATITIS C
;  TITLE OF INVENTION:  VIRUS
;  FILE REFERENCE: 2551-94
;  CURRENT APPLICATION NUMBER: US/10/651,165
;  CURRENT FILING DATE:  2003-09-02
;  PRIOR APPLICATION NUMBER: US/08/974,690C
;  PRIOR FILING DATE: 1997-11-19
;  PRIOR APPLICATION NUMBER: PCT/EP94/03555
;  PRIOR FILING DATE: 1994-10-28
;  PRIOR APPLICATION NUMBER: EP 93402718.6
;  PRIOR FILING DATE: 1993-11-04
;  NUMBER OF SEQ ID NOS: 286
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 181
;   LENGTH: 450
;   TYPE: PRT
;   ORGANISM: hepatitis C virus
US-10-651-165-181

Alignment Scores:
Pred. No.:              1.17e-42        Length:         450
Score:                  569.00          Matches:        104
Percent Similarity:     94.78%          Conservative:   5
Best Local Similarity:  90.43%          Mismatches:     6
Query Match:            89.05%          Indels:         1
DB:                     12              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-651-165-181 (1-450)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||:::||||||||||||||||||||||||||||||||||||  |||||||||
Db          1 MetSerThrIleProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||:::||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||  ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::  ||||||  |||||||||:::||||||||||||||||
Db         61 ArgArgGlnProIleProLysValArgArgProGluGlyArgThrTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||  ||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 115

RESULT 14
US-09-941-611-23
; Sequence 23, Application US/09941611
; Patent No. US20020106640A1
;   GENERAL INFORMATION:
;       APPLICANT: DELEYS, ROBERT J
;                  POLLET, DIRK
;                  MAERTENS, GEERT
;                  VAN HEUVERSWUN, HUGO
;       TITLE OF INVENTION: SYNTHETIC ANTIGENS FOR THE DETECTION OF
;                           ANTIBODIES TO HEPATITIS C VIRUS
;       NUMBER OF SEQUENCES: 23
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: NIXON & VANDERHYE P.C.
;            STREET: 1100 NORTH GLEBE ROAD
;            CITY: ARLINGTON
;            STATE: VA
```

```
;            COUNTRY: USA
;            ZIP: 22201
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.30
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/941,611
;            FILING DATE: 30-Aug-2001
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 08/391,671
;            FILING DATE: 1995-02-21
;            APPLICATION NUMBER: WO PCT/EP91/02409
;            FILING DATE: 13-DEC-1991
;            APPLICATION NUMBER: EP 90124241.2
;            FILING DATE: 14-DEC-1990
;       ATTORNEY/AGENT INFORMATION:
;            NAME: SADOFF, B.J.
;            REGISTRATION NUMBER: 36,663
;            REFERENCE/DOCKET NUMBER: 1487-5
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 7038164000
;            TELEFAX: 7038164100
;   INFORMATION FOR SEQ ID NO: 23:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 2894 amino acids
;            TYPE: amino acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: peptide
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
;       SEQUENCE DESCRIPTION: SEQ ID NO: 23:
US-09-941-611-23

Alignment Scores:
Pred. No.:              1.33e-42      Length:         2894
Score:                  569.00        Matches:        104
Percent Similarity:     94.78%        Conservative:   5
Best Local Similarity:  90.43%        Mismatches:     6
Query Match:            89.05%        Indels:         1
DB:                     9             Gaps:           0

US-09-873-224A-147 (1-345) x US-09-941-611-23 (1-2894)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||:::|||||||||||||||||||||||||||||||||||   |||||||||
Db          1 MetSerThrIleProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||:::|||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::   ||||||   |||||||||:::|||||||||||||||
Db         61 ArgArgGlnProIleProLysValArgArgProGluGlyArgThrTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||   |||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 115

RESULT 15
US-10-044-995-23
; Sequence 23, Application US/10044995
; Publication No. US20030049685A1
;  GENERAL INFORMATION:
;       APPLICANT: DELEYS, ROBERT J
;                  POLLET, DIRK
;                  MAERTENS, GEERT
;                  VAN HEUVERSWUN, HUGO
;       TITLE OF INVENTION: SYNTHETIC ANTIGENS FOR THE DETECTION OF
;                           ANTIBODIES TO HEPATITIS C VIRUS
;       NUMBER OF SEQUENCES: 23
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: NIXON & VANDERHYE P.C.
;            STREET: 1100 NORTH GLEBE ROAD
;            CITY: ARLINGTON
;            STATE: VA
;            COUNTRY: USA
;            ZIP: 22201
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.30
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/10/044,995
;            FILING DATE: 15-Jan-2002
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 08/391,671
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: US 07/920,286
;            FILING DATE: 14-OCT-1992
;            APPLICATION NUMBER: WO PCT/EP91/02409
;            FILING DATE: 13-DEC-1991
;            APPLICATION NUMBER: EP 90124241.2
;            FILING DATE: 14-DEC-1990
;       ATTORNEY/AGENT INFORMATION:
;            NAME: SADOFF, B.J.
;            REGISTRATION NUMBER: 36,663
;            REFERENCE/DOCKET NUMBER: 1487-5
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 7038164000
;            TELEFAX: 7038164100
;   INFORMATION FOR SEQ ID NO: 23:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 2894 amino acids
;            TYPE: amino acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: peptide
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
;       SEQUENCE DESCRIPTION: SEQ ID NO: 23:
US-10-044-995-23

Alignment Scores:
Pred. No.:              1.33e-42      Length:         2894
Score:                  569.00        Matches:        104
Percent Similarity:     94.78%        Conservative:   5
Best Local Similarity:  90.43%        Mismatches:     6
Query Match:            89.05%        Indels:         1
DB:                     14            Gaps:           0

US-09-873-224A-147 (1-345) x US-10-044-995-23 (1-2894)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||:::|||||||||||||||||||||||||||||||||||   |||||||||
Db          1 MetSerThrIleProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||:::|||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
```

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            ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
            ||||||||||||||||||:::   ||||||   |||||||||:::|||||||||||||||
Db         61 ArgArgGlnProIleProLysValArgArgProGluGlyArgThrTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
            |||||||||||||||||||||||||   |||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 115
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Job time : 46.5 secs

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GenCore version 5.1.6

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Run on: August 10, 2004, 20:42:52 ; Search time 18 Seconds
(without alignments)
1978.996 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 115
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Ygapop 60.0 , Ygapext 60.0
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 389414 seqs, 51625971 residues

Word size: 1

Total number of hits satisfying chosen parameters: 663654

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

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-DB=Issued_Patents_AA -QFMT=fastan -SUFFIX=olin2p.rai -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=oligo -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=quality -THR_MIN=1 -ALIGN=15 -MODE=LOCAL
-OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US09873224_@CGN_1_1_27_@runat_10082004_171006_17824 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=60 -XGAPEXT=60 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=60 -YGAPEXT=60 -DELOP=6 -DELEXT=7

Database : Issued_Patents_AA:*
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6: /cgn2_6/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	98	85.2	115	3	US-08-836-075A-50	Sequence 50, Appl
2	83	72.2	100	4	US-08-635-886C-233	Sequence 233, App
3	83	72.2	100	4	US-08-974-690C-233	Sequence 233, App
4	44	38.3	124	1	US-08-244-116B-15	Sequence 15, Appl
5	44	38.3	191	2	US-08-290-665A-187	Sequence 187, App
6	44	38.3	191	2	US-08-290-665A-188	Sequence 188, App
7	44	38.3	191	2	US-08-290-665A-189	Sequence 189, App
8	44	38.3	191	2	US-08-290-665A-190	Sequence 190, App
9	44	38.3	191	2	US-08-290-665A-191	Sequence 191, App
10	44	38.3	191	2	US-08-290-665A-192	Sequence 192, App
11	44	38.3	191	2	US-08-290-665A-193	Sequence 193, App
12	44	38.3	191	2	US-08-290-665A-195	Sequence 195, App
13	44	38.3	191	2	US-08-290-665A-196	Sequence 196, App
14	44	38.3	191	2	US-08-290-665A-197	Sequence 197, App
15	44	38.3	191	5	PCT-US95-10398-187	Sequence 187, App
16	44	38.3	191	5	PCT-US95-10398-188	Sequence 188, App
17	44	38.3	191	5	PCT-US95-10398-189	Sequence 189, App
18	44	38.3	191	5	PCT-US95-10398-190	Sequence 190, App
19	44	38.3	191	5	PCT-US95-10398-191	Sequence 191, App
20	44	38.3	191	5	PCT-US95-10398-192	Sequence 192, App
21	44	38.3	191	5	PCT-US95-10398-193	Sequence 193, App
22	44	38.3	191	5	PCT-US95-10398-195	Sequence 195, App
23	44	38.3	191	5	PCT-US95-10398-196	Sequence 196, App
24	44	38.3	191	5	PCT-US95-10398-197	Sequence 197, App
25	44	38.3	319	4	US-08-635-886C-217	Sequence 217, App
26	44	38.3	319	4	US-08-635-886C-219	Sequence 219, App
27	44	38.3	319	4	US-08-974-690C-217	Sequence 217, App
28	44	38.3	319	4	US-08-974-690C-219	Sequence 219, App
29	37	32.2	191	2	US-08-290-665A-194	Sequence 194, App
30	37	32.2	191	5	PCT-US95-10398-194	Sequence 194, App
31	34	29.6	42	3	US-08-380-160-10	Sequence 10, Appl
32	34	29.6	46	1	US-08-262-037-27	Sequence 27, Appl
33	34	29.6	56	1	US-08-262-037-28	Sequence 28, Appl
34	34	29.6	61	1	US-08-262-037-29	Sequence 29, Appl
35	34	29.6	89	1	US-07-681-703B-24	Sequence 24, Appl
36	34	29.6	89	2	US-08-407-410B-24	Sequence 24, Appl
37	34	29.6	89	2	US-08-485-500-24	Sequence 24, Appl
38	34	29.6	89	5	PCT-US91-02370-24	Sequence 24, Appl
39	34	29.6	119	1	US-07-681-703B-18	Sequence 18, Appl
40	34	29.6	119	2	US-08-407-410B-18	Sequence 18, Appl
41	34	29.6	119	2	US-08-485-500-18	Sequence 18, Appl
42	34	29.6	119	5	PCT-US91-02370-18	Sequence 18, Appl
43	34	29.6	120	4	US-08-850-328-2	Sequence 2, Appli
44	34	29.6	144	3	US-08-444-818-103	Sequence 103, App
45	34	29.6	150	1	US-07-681-703B-16	Sequence 16, Appl

ALIGNMENTS

RESULT 1
US-08-836-075A-50
; Sequence 50, Application US/08836075A
; Patent No. 6180768
; GENERAL INFORMATION:
; APPLICANT: MAERTENS, GEERT
; APPLICANT: STUYVER, LIEVEN
; TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
; TITLE OF INVENTION: AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
; TITLE OF INVENTION: AGENTS
; NUMBER OF SEQUENCES: 207
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ARNOLD, WHITE & DURKEE
; STREET: P.O. BOX 4433
; CITY: HOUSTON
; STATE: TEXAS
; COUNTRY: USA
; ZIP: 77210-4433
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Microsoft Word 6.0 / ASCII text output
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/836,075A
; FILING DATE: 21 Apr 1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/EP95/04155
; FILING DATE: 23 Oct 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: EP 94870166.9
; FILING DATE: 21 Oct 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: EP 95870076.7
; FILING DATE: 28 Jun 1995
; ATTORNEY/AGENT INFORMATION:

```
;      NAME:  KAMMERER, PATRICIA A.
;      REGISTRATION NUMBER:  29,775
;      REFERENCE/DOCKET NUMBER:  INNS:004
;  INFORMATION FOR SEQ ID NO:  50:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  115 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-08-836-075A-50

Alignment Scores:
Pred. No.:              5.09e-83        Length:         115
Score:                  98.00           Matches:        98
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            85.22%          Indels:         0
DB:                     3               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-836-075A-50 (1-115)

Qy         51 CGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTA 110
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         18 ArgProGlnAspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeu 37

Qy        111 CCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAA 170
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         38 ProArgArgGlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGln 57

Qy        171 CCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCT 230
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         58 ProArgSerArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAla 77

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 2
US-08-635-886C-233
; Sequence 233, Application US/08635886C
; Patent No. 6555114
; GENERAL INFORMATION:
;  APPLICANT: LEROUX-ROELS, Geert
;  APPLICANT:  DELEYS, Robert
;  APPLICANT:  MAERTENS, Geert
;  TITLE OF INVENTION: IMMUNODOMINANT HUMAN T CELL EPITOPES OF HEPATITIS C
;  TITLE OF INVENTION:  VIRUS
;  FILE REFERENCE: 2752-18
;  CURRENT APPLICATION NUMBER: US/08/635,886C
;  CURRENT FILING DATE:  1996-04-25
;  PRIOR APPLICATION NUMBER: PCT/EP94/03555
;  PRIOR FILING DATE: 1994-10-28
;  PRIOR APPLICATION NUMBER: EP 93402718.6
;  PRIOR FILING DATE: 1993-11-04
;  NUMBER OF SEQ ID NOS: 286
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 233
;   LENGTH: 100
;   TYPE: PRT
;   ORGANISM: hepatitis C virus
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (17)..(17)
;   OTHER INFORMATION: Xaa is any amino acid
US-08-635-886C-233

Alignment Scores:
Pred. No.:              4.51e-69        Length:         100
Score:                  83.00           Matches:        83
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            72.17%          Indels:         0
DB:                     4               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-635-886C-233 (1-100)

Qy         51 CGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTA 110
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         18 ArgProGlnAspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeu 37

Qy        111 CCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAA 170
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         38 ProArgArgGlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGln 57

Qy        171 CCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCT 230
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         58 ProArgSerArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAla 77

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCG 299
              |||||||||
Db         98 LeuSerPro 100

RESULT 3
US-08-974-690C-233
; Sequence 233, Application US/08974690C
; Patent No. 6613333
; GENERAL INFORMATION:
;  APPLICANT: LEROUX-ROELS, Geert
;  APPLICANT:  DELEYS, Robert
;  APPLICANT:  MAERTENS, Geert
;  TITLE OF INVENTION: IMMUNODOMINANT HUMAN T CELL EPITOPES OF HEPATITIS C
;  TITLE OF INVENTION:  VIRUS
;  FILE REFERENCE: 2551-94
;  CURRENT APPLICATION NUMBER: US/08/974,690C
;  CURRENT FILING DATE:  1997-11-19
;  PRIOR APPLICATION NUMBER: PCT/EP94/03555
;  PRIOR FILING DATE: 1994-10-28
;  PRIOR APPLICATION NUMBER: EP 93402718.6
;  PRIOR FILING DATE: 1993-11-04
;  NUMBER OF SEQ ID NOS: 286
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 233
;   LENGTH: 100
;   TYPE: PRT
;   ORGANISM: hepatitis C virus
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (17)..(17)
;   OTHER INFORMATION: Xaa is any amino acid
US-08-974-690C-233

Alignment Scores:
Pred. No.:              4.51e-69        Length:         100
Score:                  83.00           Matches:        83
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            72.17%          Indels:         0
DB:                     4               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-974-690C-233 (1-100)

Qy         51 CGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTA 110
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         18 ArgProGlnAspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeu 37

Qy        111 CCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAA 170
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         38 ProArgArgGlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGln 57
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```
Qy        171 CCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCT 230
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         58 ProArgSerArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAla 77

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCG 299
              |||||||||
Db         98 LeuSerPro 100
```

RESULT 4
US-08-244-116B-15
; Sequence 15, Application US/08244116B
; Patent No. 5763159
; GENERAL INFORMATION:
; APPLICANT: Simmonds, Peter
; APPLICANT: Chan, Shiu-Wan
; APPLICANT: Yap, Peng L.
; TITLE OF INVENTION: Hepatitis-C Virus Testing
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell, Seltzer, Park & Gibson, P.A.
; STREET: 1211 East Morehead Street
; CITY: Charlotte
; STATE: No. 5763159th Carolina
; COUNTRY: United States
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0. Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/244,116B
; FILING DATE: 15-JUL-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB92/02143
; FILING DATE: 20-NOV-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 1749-125
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 704-377-1561
; TELEFAX: 704-334-2014
; INFORMATION FOR SEQ ID NO: 15:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 124 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: yes
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; ORGANISM: Hepatitis-C virus
US-08-244-116B-15

Alignment Scores:

Pred. No.:	7.6e-33	Length:	124
Score:	44.00	Matches:	44
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	38.26%	Indels:	0
DB:	1	Gaps:	0

US-09-873-224A-147 (1-345) x US-08-244-116B-15 (1-124)

```
Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         68 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 87

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         88 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 107

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        108 ProArgArgArg 111
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RESULT 5
US-08-290-665A-187
; Sequence 187, Application US/08290665A
; Patent No. 5882852
; GENERAL INFORMATION:
; APPLICANT: BUKH, J., MILLER, R.H. AND
; APPLICANT: PURCELL, R.H.
; TITLE OF INVENTION: NUCLEOTIDE AND DEDUCED
; TITLE OF INVENTION: AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
; TITLE OF INVENTION: CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
; TITLE OF INVENTION: AND THE USE OF REAGENTS DERIVED FROM THESE
; TITLE OF INVENTION: SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
; NUMBER OF SEQUENCES: 263
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MORGAN & FINNEGAN
; STREET: 345 PARK AVENUE
; CITY: NEW YORK
; STATE: NEW YORK
; COUNTRY: USA
; ZIP: 10154
; COMPUTER READABLE FORM:
; MEDIUM TYPE: FLOPPY DISK
; COMPUTER: IBM PC COMPATIBLE
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WORDPERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/290,665A
; FILING DATE: 15-AUG-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: RICHARD W. BORK
; REGISTRATION NUMBER: 36,459
; REFERENCE/DOCKET NUMBER: 2026-4116
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 758-4800
; TELEFAX: (212) 751-6849
; TELEX: 421792
; INFORMATION FOR SEQ ID NO: 187:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 191 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; ORIGINAL SOURCE:
; ORGANISM: homosapiens
; INDIVIDUAL ISOLATE: HK10
US-08-290-665A-187

Alignment Scores:

Pred. No.:	7.13e-33	Length:	191
Score:	44.00	Matches:	44
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	38.26%	Indels:	0
DB:	2	Gaps:	0

US-09-873-224A-147 (1-345) x US-08-290-665A-187 (1-191)

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Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91
```

```
Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 6
US-08-290-665A-188
; Sequence 188, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  188:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S52
US-08-290-665A-188

Alignment Scores:
Pred. No.:                7.13e-33        Length:         191
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-188 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 7
US-08-290-665A-189
; Sequence 189, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  189:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S2
US-08-290-665A-189

Alignment Scores:
Pred. No.:                7.13e-33        Length:         191
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-189 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
```

```
Db        112 ProArgArgArg 115

RESULT 8
US-08-290-665A-190
; Sequence 190, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  190:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  DK12
US-08-290-665A-190

Alignment Scores:
Pred. No.:              7.13e-33        Length:         191
Score:                  44.00           Matches:        44
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            38.26%          Indels:         0
DB:                     2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-190 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 9
US-08-290-665A-191
; Sequence 191, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  191:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z4
US-08-290-665A-191

Alignment Scores:
Pred. No.:              7.13e-33        Length:         191
Score:                  44.00           Matches:        44
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            38.26%          Indels:         0
DB:                     2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-191 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 10
US-08-290-665A-192
; Sequence 192, Application US/08290665A
; Patent No. 5882852
```

```
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  192:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z8
US-08-290-665A-192

Alignment Scores:
Pred. No.:              7.13e-33        Length:         191
Score:                  44.00           Matches:        44
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            38.26%          Indels:         0
DB:                     2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-192 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 11
US-08-290-665A-193
; Sequence 193, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  193:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z1
US-08-290-665A-193

Alignment Scores:
Pred. No.:              7.13e-33        Length:         191
Score:                  44.00           Matches:        44
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            38.26%          Indels:         0
DB:                     2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-193 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 12
US-08-290-665A-195
; Sequence 195, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
```

```
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  195:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z6
US-08-290-665A-195

Alignment Scores:
Pred. No.:                7.13e-33        Length:         191
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-195 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 13
US-08-290-665A-196
; Sequence 196, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  196:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z7
US-08-290-665A-196

Alignment Scores:
Pred. No.:                7.13e-33        Length:         191
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-196 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 14
US-08-290-665A-197
; Sequence 197, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
```

```
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
;       ZIP:  10154
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  FLOPPY DISK
;       COMPUTER:  IBM PC COMPATIBLE
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  WORDPERFECT 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/290,665A
;       FILING DATE:  15-AUG-1994
;       CLASSIFICATION:  435
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  197:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  191 amino acids
;       TYPE:  amino acid
;       STRANDEDNESS:  unknown
;       TOPOLOGY:  unknown
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  DK13
US-08-290-665A-197

Alignment Scores:
Pred. No.:                7.13e-33        Length:         191
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-197 (1-191)

Qy         213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy         273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy         333 CCCCGGCGCAGG 344
               ||||||||||||
Db         112 ProArgArgArg 115

RESULT 15
PCT-US95-10398-187
; Sequence 187, Application PC/TUS9510398
;  GENERAL INFORMATION:
;     APPLICANT:  BUKH, J., MILLER, R.H. AND
;     APPLICANT:  PURCELL, R.H.
;     TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;     TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;     TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;     TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;     TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;     NUMBER OF SEQUENCES:  263
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  MORGAN & FINNEGAN
;       STREET:  345 PARK AVENUE
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
;       ZIP:  10154
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  FLOPPY DISK
;       COMPUTER:  IBM PC COMPATIBLE
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  WORDPERFECT 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/US95/10398
;       FILING DATE:  15-AUG-1995
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/086,428
;       FILING DATE:  29 JUNE 1993
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/290/665
;       FILING DATE:  15 AUGUST 1994
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  187:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  191 amino acids
;       TYPE:  amino acid
;       STRANDEDNESS:  unknown
;       TOPOLOGY:  unknown
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  HK10
PCT-US95-10398-187

Alignment Scores:
Pred. No.:                7.13e-33        Length:         191
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       5               Gaps:           0

US-09-873-224A-147 (1-345) x PCT-US95-10398-187 (1-191)

Qy         213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy         273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy         333 CCCCGGCGCAGG 344
               ||||||||||||
Db         112 ProArgArgArg 115


Search completed: August 10, 2004, 20:53:11
Job time : 23 secs
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GenCore version 5.1.6

OM nucleic - protein search, using frame_plus_n2p model

Run on: August 10, 2004, 20:50:48 ; Search time 43.5 Seconds
(without alignments)
4975.660 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 115
Sequence: 1 atgagcacacttcctaaacc.....aaatgacccccggcgcagga 345

Scoring table: OLIGO
Xgapop 60.0 , Xgapext 60.0
Ygapop 60.0 , Ygapext 60.0
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 1291235 seqs, 313682936 residues

Word size: 1

Total number of hits satisfying chosen parameters: 2479628

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Command line parameters:
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-DB=Published_Applications_AA -QFMT=fastan -SUFFIX=olin2p.rapb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=oligo
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=quality -THR_MIN=1
-ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US09873224_@CGN_1_1_13_@runat_10082004_171007_17858
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=60 -XGAPEXT=60
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=60 -YGAPEXT=60 -DELOP=6 -DELEXT=7

Database : Published_Applications_AA:*
1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
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7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
9: /cgn2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep:*
10: /cgn2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*
11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*
12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
13: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep:*
14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*
15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
17: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*
18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	115	100.0	115	12	US-09-873-224-148	Sequence 148, App
2	98	85.2	115	9	US-09-851-138-50	Sequence 50, Appl
3	98	85.2	115	10	US-09-899-046-148	Sequence 148, App
4	98	85.2	115	10	US-09-878-281-148	Sequence 148, App
5	83	72.2	100	12	US-10-651-165-233	Sequence 233, App
6	44	38.3	124	14	US-10-396-964-15	Sequence 15, Appl
7	44	38.3	166	10	US-09-899-046-164	Sequence 164, App
8	44	38.3	166	10	US-09-878-281-164	Sequence 164, App
9	44	38.3	166	12	US-09-873-224-164	Sequence 164, App
10	44	38.3	189	12	US-10-450-649-9	Sequence 9, Appli
11	44	38.3	319	12	US-10-651-165-217	Sequence 217, App
12	44	38.3	319	12	US-10-651-165-219	Sequence 219, App
13	38	33.0	130	14	US-10-268-569-19	Sequence 19, Appl
14	38	33.0	161	14	US-10-230-381-5	Sequence 5, Appli
15	38	33.0	191	14	US-10-230-381-53	Sequence 53, Appl
16	38	33.0	191	14	US-10-230-381-54	Sequence 54, Appl
17	38	33.0	191	14	US-10-230-381-55	Sequence 55, Appl
18	38	33.0	193	14	US-10-230-381-50	Sequence 50, Appl
19	38	33.0	193	14	US-10-230-381-51	Sequence 51, Appl
20	38	33.0	193	14	US-10-230-381-52	Sequence 52, Appl
21	38	33.0	209	14	US-10-230-381-3	Sequence 3, Appli
22	38	33.0	209	14	US-10-230-381-7	Sequence 7, Appli
23	38	33.0	373	14	US-10-230-381-11	Sequence 11, Appl
24	38	33.0	373	14	US-10-230-381-13	Sequence 13, Appl
25	38	33.0	373	14	US-10-230-381-15	Sequence 15, Appl
26	36	31.3	166	10	US-09-899-046-194	Sequence 194, App
27	36	31.3	166	10	US-09-878-281-194	Sequence 194, App
28	36	31.3	166	12	US-09-873-224-194	Sequence 194, App
29	34	29.6	113	9	US-09-921-397-78	Sequence 78, Appl
30	34	29.6	122	14	US-10-098-857B-1	Sequence 1, Appli
31	34	29.6	126	10	US-09-899-046-166	Sequence 166, App
32	34	29.6	126	10	US-09-878-281-166	Sequence 166, App
33	34	29.6	126	12	US-09-873-224-166	Sequence 166, App
34	34	29.6	151	14	US-10-292-129-14	Sequence 14, Appl
35	34	29.6	182	9	US-09-929-955-2	Sequence 2, Appli
36	34	29.6	182	13	US-10-104-966-2	Sequence 2, Appli
37	34	29.6	182	16	US-10-719-619-2	Sequence 2, Appli
38	34	29.6	190	12	US-10-450-649-7	Sequence 7, Appli
39	34	29.6	190	14	US-10-268-562-1	Sequence 1, Appli
40	34	29.6	235	15	US-10-365-620-58	Sequence 58, Appl
41	34	29.6	249	15	US-10-365-620-54	Sequence 54, Appl
42	34	29.6	258	12	US-10-651-165-196	Sequence 196, App
43	34	29.6	319	12	US-10-651-165-218	Sequence 218, App
44	34	29.6	424	14	US-10-173-480-28	Sequence 28, Appl
45	34	29.6	450	12	US-10-651-165-179	Sequence 179, App

ALIGNMENTS

RESULT 1
US-09-873-224-148
; Sequence 148, Application US/09873224
; Publication No. US20030064360A1
; GENERAL INFORMATION:
; APPLICANT: <Unknown>
; TITLE OF INVENTION: New sequences of hepatitis C virus
; genotypes for diagnosis, prophylaxis and therapy.
; NUMBER OF SEQUENCES: 270
; CORRESPONDENCE ADDRESS:
; STREET: Industriepark Zwijnaarde 7, box 4
; CITY: Ghent
; COUNTRY: Belgium
; ZIP: B-9052
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/873,224
; FILING DATE: 05-Jun-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:

```
;             APPLICATION NUMBER: 08/362,455
;             FILING DATE: <Unknown>
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Innogenetics sa.
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 00 32 9 241 07 11
;             TELEFAX: 00 32 9 241 07 99
;   INFORMATION FOR SEQ ID NO: 148:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 115 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;        MOLECULE TYPE: protein
;        SEQUENCE DESCRIPTION: SEQ ID NO: 148:
US-09-873-224-148

Alignment Scores:
Pred. No.:                8.87e-98      Length:          115
Score:                    115.00        Matches:         115
Percent Similarity:       100.00%       Conservative:    0
Best Local Similarity:    100.00%       Mismatches:      0
Query Match:              100.00%       Indels:          0
DB:                       12            Gaps:            0

US-09-873-224A-147 (1-345) x US-09-873-224-148 (1-115)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrAsnProGlyHisArg 20

Qy         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 ThrLeuSerSerGlnAlaAlaValArgSerLeuValGluPheThrCysTyrHisAlaGly 40

Qy        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         41 AlaProSerTrpValCysValGlnCysAlaArgLeuProSerGlyArgAsnLeuAlaVal 60

Qy        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 GlyAlaAsnProSerProGlyArgAlaGluProArgAlaGlyProGlyLeuSerProGly 80

Qy        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 ThrLeuGlyProTyrMetGlyMetArgAlaAlaGlyGlyGlnGlyGlySerCysProArg 100

Qy        301 GCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 345
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 AlaAlaLeuAlaArgArgGlyAlaGlnMetThrProGlyAlaGly 115

RESULT 2
US-09-851-138-50
; Sequence 50, Application US/09851138
; Publication No. US20020183508A1
;   GENERAL INFORMATION:
;        APPLICANT: MAERTENS, GEERT
;                   STUYVER, LIEVEN
;        TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;                            AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;                            AGENTS
;        NUMBER OF SEQUENCES: 207
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: ARNOLD, WHITE & DURKEE
;             STREET: P.O. BOX 4433
;             CITY: HOUSTON
;             STATE: TEXAS
;             COUNTRY: USA
;             ZIP: 77210-4433
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: Microsoft Word 6.0 / ASCII text output
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;   INFORMATION FOR SEQ ID NO: 50:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 115 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;        MOLECULE TYPE: peptide
;        SEQUENCE DESCRIPTION: SEQ ID NO: 50:
US-09-851-138-50

Alignment Scores:
Pred. No.:                5.14e-82      Length:          115
Score:                    98.00         Matches:         98
Percent Similarity:       100.00%       Conservative:    0
Best Local Similarity:    100.00%       Mismatches:      0
Query Match:              85.22%        Indels:          0
DB:                       9             Gaps:            0

US-09-873-224A-147 (1-345) x US-09-851-138-50 (1-115)

Qy         51 CGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTA 110
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         18 ArgProGlnAspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeu 37

Qy        111 CCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAA 170
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         38 ProArgArgGlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGln 57

Qy        171 CCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCT 230
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         58 ProArgSerArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAla 77

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 3
US-09-899-046-148
; Sequence 148, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
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;  INFORMATION FOR SEQ ID NO:  148:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  115 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  protein
US-09-899-046-148

Alignment Scores:
Pred. No.:                5.14e-82        Length:          115
Score:                    98.00           Matches:         98
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              85.22%          Indels:          0
DB:                       10              Gaps:            0

US-09-873-224A-147 (1-345) x US-09-899-046-148 (1-115)

Qy          51 CGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTA 110
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          18 ArgProGlnAspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeu 37

Qy         111 CCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAA 170
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          38 ProArgArgGlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGln 57

Qy         171 CCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCT 230
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          58 ProArgSerArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAla 77

Qy         231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy         291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 4
US-09-878-281-148
; Sequence 148, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  New sequences of hepatitis C virus
;     TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;     NUMBER OF SEQUENCES:  270
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/878,281
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;  INFORMATION FOR SEQ ID NO:  148:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  115 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  protein
US-09-878-281-148

Alignment Scores:
Pred. No.:                5.14e-82        Length:          115
Score:                    98.00           Matches:         98
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              85.22%          Indels:          0
DB:                       10              Gaps:            0

US-09-873-224A-147 (1-345) x US-09-878-281-148 (1-115)

Qy          51 CGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTA 110
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          18 ArgProGlnAspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeu 37

Qy         111 CCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAA 170
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          38 ProArgArgGlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGln 57

Qy         171 CCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCT 230
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          58 ProArgSerArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAla 77

Qy         231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy         291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 5
US-10-651-165-233
; Sequence 233, Application US/10651165
; Publication No. US20040047877A1
; GENERAL INFORMATION:
;  APPLICANT: LEROUX-ROELS, Geert
;  APPLICANT:  DELEYS, Robert
;  APPLICANT:  MAERTENS, Geert
;  TITLE OF INVENTION: IMMUNODOMINANT HUMAN T CELL EPITOPES OF HEPATITIS C
;  TITLE OF INVENTION:  VIRUS
;  FILE REFERENCE: 2551-94
;  CURRENT APPLICATION NUMBER: US/10/651,165
;  CURRENT FILING DATE:  2003-09-02
;  PRIOR APPLICATION NUMBER: US/08/974,690C
;  PRIOR FILING DATE: 1997-11-19
;  PRIOR APPLICATION NUMBER: PCT/EP94/03555
;  PRIOR FILING DATE: 1994-10-28
;  PRIOR APPLICATION NUMBER: EP 93402718.6
;  PRIOR FILING DATE: 1993-11-04
;  NUMBER OF SEQ ID NOS: 286
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 233
;   LENGTH: 100
;   TYPE: PRT
;   ORGANISM: hepatitis C virus
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (17)..(17)
;   OTHER INFORMATION: Xaa is any amino acid
US-10-651-165-233

Alignment Scores:
Pred. No.:                4.25e-68        Length:          100
Score:                    83.00           Matches:         83
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              72.17%          Indels:          0
DB:                       12              Gaps:            0

US-09-873-224A-147 (1-345) x US-10-651-165-233 (1-100)

Qy          51 CGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTA 110
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          18 ArgProGlnAspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeu 37

Qy         111 CCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAA 170
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          38 ProArgArgGlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGln 57

Qy         171 CCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCT 230
```

```
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         58 ProArgSerArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAla 77

Qy        231 CAGCCCGGGTACCCTTGGCCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCG 299
                |||||||||
Db         98 LeuSerPro 100
```

RESULT 6
US-10-396-964-15
; Sequence 15, Application US/10396964
; Publication No. US20030198946A1
; GENERAL INFORMATION:
; APPLICANT: Simmonds, Peter
; APPLICANT: Chan, Shiu-Wan
; APPLICANT: Yap, Peng L.
; TITLE OF INVENTION: Hepatitis-C Virus Testing
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell, Seltzer, Park & Gibson, P.A.
; STREET: 1211 East Morehead Street
; CITY: Charlotte
; STATE: No. US20030198946A1th Carolina
; COUNTRY: United States
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0. Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/396,964
; FILING DATE: 23-MARCH-2003
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/244,116B
; FILING DATE: 15-JUL-1994
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB92/02143
; FILING DATE: 20-NOV-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 1749-125
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 704-377-1561
; TELEFAX: 704-334-2014
; INFORMATION FOR SEQ ID NO: 15:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 124 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: yes
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; ORGANISM: Hepatitis-C virus
US-10-396-964-15

Alignment Scores:

Pred. No.:	5.96e-32	Length:	124
Score:	44.00	Matches:	44
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	38.26%	Indels:	0
DB:	14	Gaps:	0

US-09-873-224A-147 (1-345) x US-10-396-964-15 (1-124)

```
Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         68 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 87

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         88 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 107

Qy        333 CCCCGGCGCAGG 344
                ||||||||||||
Db        108 ProArgArgArg 111
```

RESULT 7
US-09-899-046-164
; Sequence 164, Application US/09899046
; Publication No. US20030008274A1
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: New sequences of hepatitis C virus
; TITLE OF INVENTION: genotypes for diagnosis, prophylaxis and therapy.
; NUMBER OF SEQUENCES: 270
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/899,046
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/362,455
; FILING DATE:
; INFORMATION FOR SEQ ID NO: 164:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 166 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-899-046-164

Alignment Scores:

Pred. No.:	5.71e-32	Length:	166
Score:	44.00	Matches:	44
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	38.26%	Indels:	0
DB:	10	Gaps:	0

US-09-873-224A-147 (1-345) x US-09-899-046-164 (1-166)

```
Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
                ||||||||||||
Db        112 ProArgArgArg 115
```

RESULT 8
US-09-878-281-164
; Sequence 164, Application US/09878281
; Publication No. US20030032005A1
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: New sequences of hepatitis C virus
; TITLE OF INVENTION: genotypes for diagnosis, prophylaxis and therapy.
; NUMBER OF SEQUENCES: 270
; COMPUTER READABLE FORM:

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;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  164:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  166 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-878-281-164

Alignment Scores:
Pred. No.:              5.71e-32        Length:         166
Score:                  44.00           Matches:        44
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            38.26%          Indels:         0
DB:                     10              Gaps:           0

US-09-873-224A-147 (1-345) x US-09-878-281-164 (1-166)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 9
US-09-873-224-164
; Sequence 164, Application US/09873224
; Publication No. US20030064360A1
;   GENERAL INFORMATION:
;        APPLICANT: <Unknown>
;        TITLE OF INVENTION: New sequences of hepatitis C virus
;                            genotypes for diagnosis, prophylaxis and therapy.
;        NUMBER OF SEQUENCES: 270
;        CORRESPONDENCE ADDRESS:
;             STREET: Industriepark Zwijnaarde 7, box 4
;             CITY: Ghent
;             COUNTRY: Belgium
;             ZIP: B-9052
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/873,224
;             FILING DATE: 05-Jun-2001
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/362,455
;             FILING DATE: <Unknown>
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Innogenetics sa.
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 00 32 9 241 07 11
;             TELEFAX: 00 32 9 241 07 99
;   INFORMATION FOR SEQ ID NO: 164:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 166 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;        MOLECULE TYPE: protein
;        SEQUENCE DESCRIPTION: SEQ ID NO: 164:
US-09-873-224-164

Alignment Scores:
Pred. No.:              5.71e-32        Length:         166
Score:                  44.00           Matches:        44
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            38.26%          Indels:         0
DB:                     12              Gaps:           0

US-09-873-224A-147 (1-345) x US-09-873-224-164 (1-166)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 10
US-10-450-649-9
; Sequence 9, Application US/10450649
; Publication No. US20040052818A1
; GENERAL INFORMATION:
;  APPLICANT: Heinz, Franz X.
;  APPLICANT:  Mandl, Christian
;  TITLE OF INVENTION: ATTENUATED LIVE VACCINE
;  FILE REFERENCE: U 014666-0
;  CURRENT APPLICATION NUMBER: US/10/450,649
;  CURRENT FILING DATE:  2003-06-16
;  PRIOR APPLICATION NUMBER: PCT/AT02/00046
;  PRIOR FILING DATE: 2002-02-11
;  PRIOR APPLICATION NUMBER: A 272/2001 AT
;  PRIOR FILING DATE: 2001-02-21
;  NUMBER OF SEQ ID NOS: 9
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
;   LENGTH: 189
;   TYPE: PRT
;   ORGANISM: Hepatitis C Virus 3
US-10-450-649-9

Alignment Scores:
Pred. No.:              5.6e-32         Length:         189
Score:                  44.00           Matches:        44
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            38.26%          Indels:         0
DB:                     12              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-450-649-9 (1-189)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         71 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 90

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         91 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 110

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        111 ProArgArgArg 114
```

```
RESULT 11
US-10-651-165-217
; Sequence 217, Application US/10651165
; Publication No. US20040047877A1
; GENERAL INFORMATION:
;  APPLICANT: LEROUX-ROELS, Geert
;  APPLICANT:  DELEYS, Robert
;  APPLICANT:  MAERTENS, Geert
;  TITLE OF INVENTION: IMMUNODOMINANT HUMAN T CELL EPITOPES OF HEPATITIS C
;  TITLE OF INVENTION:  VIRUS
;  FILE REFERENCE: 2551-94
;  CURRENT APPLICATION NUMBER: US/10/651,165
;  CURRENT FILING DATE:  2003-09-02
;  PRIOR APPLICATION NUMBER: US/08/974,690C
;  PRIOR FILING DATE: 1997-11-19
;  PRIOR APPLICATION NUMBER: PCT/EP94/03555
;  PRIOR FILING DATE: 1994-10-28
;  PRIOR APPLICATION NUMBER: EP 93402718.6
;  PRIOR FILING DATE: 1993-11-04
;  NUMBER OF SEQ ID NOS: 286
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 217
;   LENGTH: 319
;   TYPE: PRT
;   ORGANISM: hepatitis C virus
US-10-651-165-217

Alignment Scores:
Pred. No.:                5.18e-32        Length:         319
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       12              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-651-165-217 (1-319)

Qy         213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy         273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy         333 CCCCGGCGCAGG 344
               ||||||||||||
Db         112 ProArgArgArg 115

RESULT 12
US-10-651-165-219
; Sequence 219, Application US/10651165
; Publication No. US20040047877A1
; GENERAL INFORMATION:
;  APPLICANT: LEROUX-ROELS, Geert
;  APPLICANT:  DELEYS, Robert
;  APPLICANT:  MAERTENS, Geert
;  TITLE OF INVENTION: IMMUNODOMINANT HUMAN T CELL EPITOPES OF HEPATITIS C
;  TITLE OF INVENTION:  VIRUS
;  FILE REFERENCE: 2551-94
;  CURRENT APPLICATION NUMBER: US/10/651,165
;  CURRENT FILING DATE:  2003-09-02
;  PRIOR APPLICATION NUMBER: US/08/974,690C
;  PRIOR FILING DATE: 1997-11-19
;  PRIOR APPLICATION NUMBER: PCT/EP94/03555
;  PRIOR FILING DATE: 1994-10-28
;  PRIOR APPLICATION NUMBER: EP 93402718.6
;  PRIOR FILING DATE: 1993-11-04
;  NUMBER OF SEQ ID NOS: 286
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 219
;   LENGTH: 319
;   TYPE: PRT
;   ORGANISM: hepatitis C virus
US-10-651-165-219

Alignment Scores:
Pred. No.:                5.18e-32        Length:         319
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       12              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-651-165-219 (1-319)

Qy         213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy         273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy         333 CCCCGGCGCAGG 344
               ||||||||||||
Db         112 ProArgArgArg 115

RESULT 13
US-10-268-569-19
; Sequence 19, Application US/10268569
; Publication No. US20030152965A1
; GENERAL INFORMATION:
;  APPLICANT: Ortho-Clinical Diagnostics, Inc.
;  TITLE OF INVENTION: HCV Core Protein Sequences
;  FILE REFERENCE: CDS-0288
;  CURRENT APPLICATION NUMBER: US/10/268,569
;  CURRENT FILING DATE:  2002-10-10
;  PRIOR APPLICATION NUMBER: 60/347,303
;  PRIOR FILING DATE: 2001-11-11
;  NUMBER OF SEQ ID NOS: 19
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 19
;   LENGTH: 130
;   TYPE: PRT
;   ORGANISM: Hepatitis C virus
US-10-268-569-19

Alignment Scores:
Pred. No.:                2.17e-26        Length:         130
Score:                    38.00           Matches:        38
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              33.04%          Indels:         0
DB:                       14              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-268-569-19 (1-130)

Qy         213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy         273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCA 326
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyPro 109

RESULT 14
US-10-230-381-5
; Sequence 5, Application US/10230381
; Publication No. US20030152591A1
; GENERAL INFORMATION:
;  APPLICANT: Innogenetics N.V.
;  TITLE OF INVENTION: New hepatitis C virus genotype 13, and its use as prophylactic,
;  TITLE OF INVENTION:  therapeutic and diagnostic agents
;  FILE REFERENCE: INNX-124-EP
```

```
;  CURRENT APPLICATION NUMBER: US/10/230,381
;  CURRENT FILING DATE:  2002-08-29
;  NUMBER OF SEQ ID NOS: 63
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
;   LENGTH: 161
;   TYPE: PRT
;   ORGANISM: Hepatitis C virus
US-10-230-381-5

Alignment Scores:
Pred. No.:              2.1e-26       Length:          161
Score:                  38.00         Matches:         38
Percent Similarity:     100.00%       Conservative:    0
Best Local Similarity:  100.00%       Mismatches:      0
Query Match:            33.04%        Indels:          0
DB:                     14            Gaps:            0

US-09-873-224A-147 (1-345) x US-10-230-381-5 (1-161)

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 15
US-10-230-381-53
; Sequence 53, Application US/10230381
; Publication No. US20030152591A1
; GENERAL INFORMATION:
;  APPLICANT: Innogenetics N.V.
;  TITLE OF INVENTION: New hepatitis C virus genotype 13, and its use as prophylactic,
;  TITLE OF INVENTION:  therapeutic and diagnostic agents
;  FILE REFERENCE: INNX-124-EP
;  CURRENT APPLICATION NUMBER: US/10/230,381
;  CURRENT FILING DATE:  2002-08-29
;  NUMBER OF SEQ ID NOS: 63
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 53
;   LENGTH: 191
;   TYPE: PRT
;   ORGANISM: hepatitis C virus
US-10-230-381-53

Alignment Scores:
Pred. No.:              2.05e-26      Length:          191
Score:                  38.00         Matches:         38
Percent Similarity:     100.00%       Conservative:    0
Best Local Similarity:  100.00%       Mismatches:      0
Query Match:            33.04%        Indels:          0
DB:                     14            Gaps:            0

US-09-873-224A-147 (1-345) x US-10-230-381-53 (1-191)

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115


Search completed: August 10, 2004, 21:01:47
Job time : 44.5 secs
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$\frac{1}{2}\pi$